

LIVE PICTURE™



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YT-1000-1000-00

LIVE PICTURE™



*Published and distributed exclusively
in North America by HSC Software
Created by FITS Imaging*

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*This tutorial has been designed to introduce you to the procedures and tools available in Live Picture that will allow you to create complex composite images. The tutorial walks you through the construction of two such images: **THE ROSE** and **EARTH PROJECT**. These two projects will expose you to many of Live Picture's major features. The two projects are designed as separate images. They can be performed in any order. In **THE ROSE** you will*



*composite two images by creating layers, duplicating layers, applying gradations and using Live Picture's automasking and retouching features. You will create a unique composite that will allow you to freely reposition individual images while retaining complex stencil and color correction combinations. **EARTH PROJECT**, the larger and more complex of the*

two images introduces you to the Live Picture "way of thinking". In the composition you will create layers, insert images and perform color correction on those layers. Views and paths will be used and combined with image distortion to



create the effect of reflections in glass. Objects will be retouched and saved as individual FITS files to be merged and repositioned in the main file. Text will be set, distorted and colored and combined with soft drop shadows. Each project is presented as a series of lessons. An intermediate composite file, in Live Picture's FITS format, is provided for each lesson.

GETTING STARTED

INSTALLING LIVE PICTURE

- 1 Insert the first Live Picture diskette in the disk drive.
- Wait until the floppy disk icon appears on your Macintosh's desktop.
- 2 Click on the program named Installer.

This is the Live Picture installer program. It will prompt you to select a disk and will then create a folder named Live Picture on this file and will install the various files and subfolders required to run Live Picture. To install Live Picture you will need 3MB of free disk space.

INSTALLING THE TUTORIAL

The Live Picture tutorial files are located on the Portfolio Disk, a CD ROM included in the Live Picture package. In order to access the high resolution tutorial images you will need a CD ROM drive.

The entire set of tutorial images require approximately 400 MB of disk space. To run the tutorial at the optimum speed we recommend that you copy the tutorial files to your hard drive. If you do not have sufficient space there are several options:

- You can access the files directly from the CD ROM. It will, however, slow the screen rendering somewhat. In this case no files need to be copied onto disk.
- You can copy only those FITS and IVUE files that you need for a given project. In this case you will need only 200 MB of disk space.
- You can copy only the JPEG versions of the IVUE files. In this case, follow the directions below but using files with the same name in the IVUE JPEG folder in place of those in the IVUE folder.

- 1 Copy the folders "The Rose" and "Earth Project" from the Portfolio Disk onto your hard drive. These two folders are located in the folder named "FITS."

These folders contain the reference files and final composite file, all in FITS format. The reference files are the intermediate files that are created at the end of each lesson. The final composite files are named Rose Final and Earth Project Final. They have been used to build output files, in CMYK TIFF, format; these output files are found in the folder named TIFF on the Portfolio Disk. The TIFF files are not used in the tutorial. They can be printed or used as a reference.

- 2 Copy the IVUE images from the folder named "IVUE" on the Portfolio Disk into the folder named IVUE on your hard disk.

The IVUE folder will require 400 Mbytes of disk space. If you wish to copy only the IVUE tutorial files required for the tutorial project you are working on you will need 120 Mbytes of free space. These are the files that you need:

<i>Tutorial Project</i>	<i>IVUE Files Required</i>
The Rose	Temple, Rose
Earth Project	Cityscape, Ferns, Sunflare, Earth

As mentioned earlier, you can use JPEG versions of these files, which are found in the IVUE JPEG folder.

PERFORMING THE TUTORIAL

Before beginning each lesson, we recommend that you first open the reference file. The reference file is the file that you will create during the lesson.

To review a reference file. First open it using the command Open FITS in the File menu. Then click on lowest layer bar, just above the background. All layers, except the first will be peeled away, and you can see the first step in the construction of this file. Then click on each successive layer in the file to gain an understanding of what will be done in the lesson.

(Keep in mind that layers are not always created in the order that you see them in the FITS file, since layers can be moved at any time. But clicking through the composite from the first layer to the last is the best way to gain an overview of how it was constructed.)

STARTING LIVE PICTURE

1 Before turning on your Macintosh you must install the hardware protection key in the ADB port. The key can be installed at either end, i.e. it can be plugged into the keyboard or into your computer. Now turn on your Macintosh.


2 Setting the RAM allocation.

Live Picture will run in a minimum RAM configuration of 32 Mbytes. We recommend that you allocate as much RAM as possible to the application. Too little RAM will result in slower screen renderings.

To allocate additional RAM to Live Picture locate the Live Picture icon, click on the icon to highlight it and select command I or select Get Info in the File menu. Highlight the Current size and enter the required amount of RAM. Remember to always leave about 1 Mbyte of RAM free for the Finder.

3 Double-click the Live Picture icon to start the program.

4 Enter your name, company and serial number in the dialog box. Find the serial number on the program diskette and enter it in the field provided.



Please enter your name, company, and Live Picture serial number.

Name	John Doe
Company	Widgets Inc.
Serial number	HYZ-1234-AB

OK

The first time that you start Live Picture you will be shown a dialog box in which you can enter your name, company and the serial number of your copy of Live Picture. Enter your name exactly as you want it to be displayed. Enter your company name (this is not essential so if this is your personal copy you can just leave this field blank). Press Enter or Return to continue.

The first time Live Picture launches, several essential files are automatically constructed. A status window will indicate which type of file is being built.

THE USER INTERFACE

The Live Picture User Interface has the following principal elements: Menu Bar, Toolbars, Layer Stack, Multiplex Bar, and Workspace.

THE MENU BAR

A standard Macintosh menu that runs horizontally across the top of your screen. The Live Picture commands are found in the pull-down menus associated with the items in the menu bar.

THE TOOLBARS

The toolbars are displayed vertically on the left side of your screen. A toolbar consists of a series of icons or buttons. Each icon represents a different tool. Each tool has options, e.g. sliders and hierarchical menus, that can be dragged out.

There are three sets of toolbars:

- Creative Tools
- Positioning Tools
- View Tools

The Positioning Tools have two modes, image insertion and repositioning.

The toolbars have a toggle at the top to move between the creative and positioning tools. View tools are activated by the Add/Edit command in the Views menu.

LAYER STACK

The Layer Stack is the wide vertical array of bars that runs down the right side of your screen. There is one layer bar for each layer in the composite image. The layer stack not only functions as a status display but also allows you to select, activate, move, customize, and delete layers. The first row of the layerbar is the layer name. Next to the name is a triangular toggle

switch. Click on the toggle to open the layer bar. The layer element icons and the hide/display toggle are revealed. If the the layer is an image layer, a thumbnail of the original source image is displayed beneath the icons.

MULTIPLEX BAR

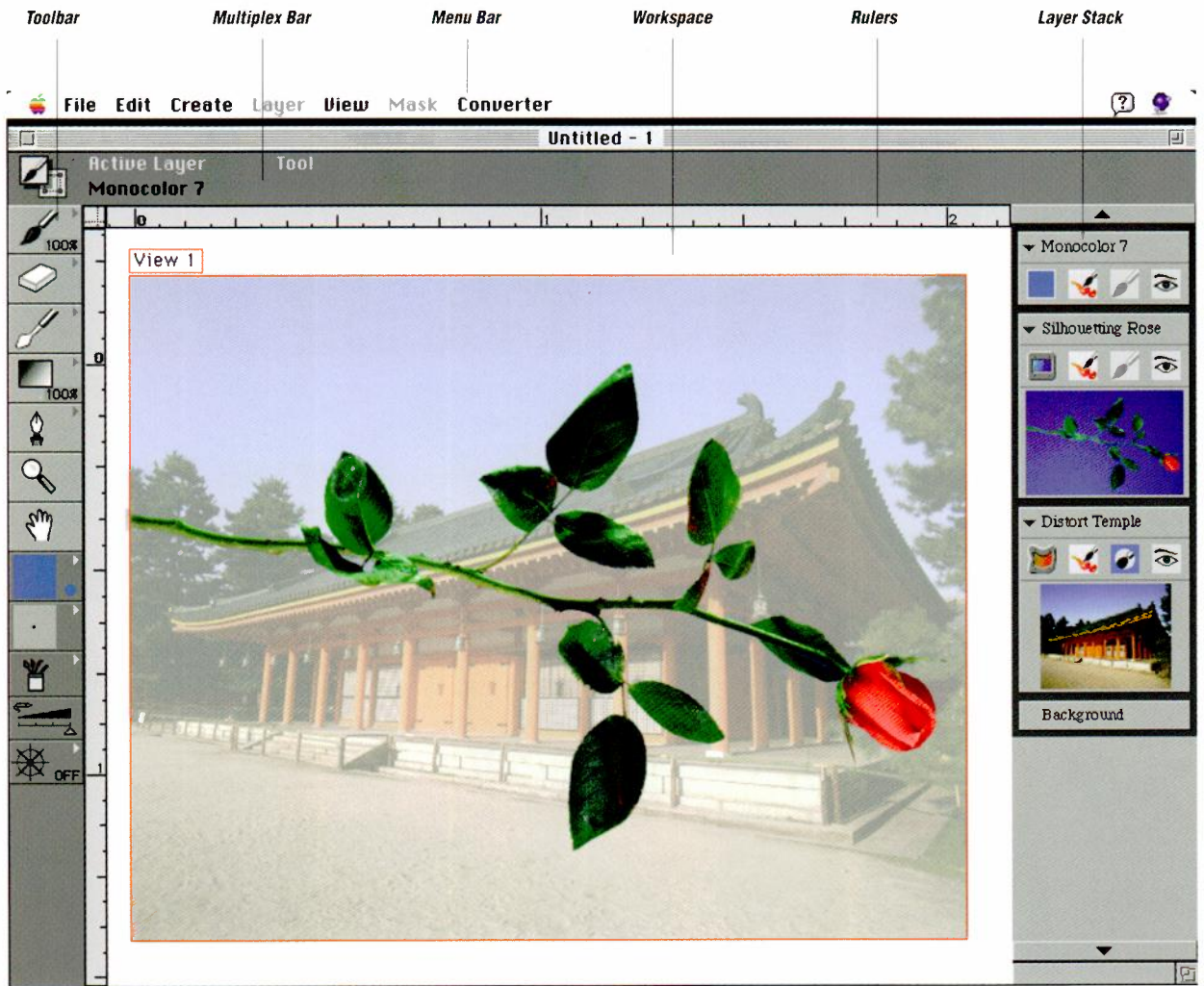
The Multiplex Bar is the horizontal area at the top of the screen but below the Menu Bar. The Multiplex Bar changes according to what tool you are using and what type of layer you are using it in. The multiplex bar is used for status and control. It displays status information about the tools and objects in the composite and provides a fixed location for interactions with the tool you're working with. Depending on the particular tool or mode, it lets you enter numbers, set tolerances, set colors and line widths.

When working with the positioning and view tools the multiplex bar contains numerical data about the position of objects in your composite. In addition, when working with the positioning and view tools, the multiplex bar offers data entry fields to precisely define coordinates, sizes and percentages. You can perform the same operations (scale, move, resize, etc.) by entering data in the multiplex bar fields, or by acting directly on the object with the stylus/mouse.

When working with the creative tools the multiplex bar displays the name of the active layer and the tool currently in use.

WORKSPACE

The workspace is the main window in which the composite image is created. The brush, marquee, and other tools can only be used within the workspace.



Multiplex Bar - Creative Mode

Current Layer

Monocolor 3

Tool

Paint

Multiplex Bar - Repositioning Mode

X Point

H 4.05

Y 5.24

Size

W 14.07

H 11.03

Scale

W 100%

H 100%

Rotate

▼ 0°

Skew

▼ 0°

Multiplex Bar - Insertion Mode

X Point

H 4.02

Y 3.6

Size

W 7.97

H 7.21

Scale

W 57.6%

H 65.9%

Rotate

▼ 0°

Skew

▼ 0°

Multiplex Bar - View Add/Edit Mode

X Point

H

Y

Size

W

H

Line Color

Line Width

Creative Toolbar

Positioning Toolbar
Repositioning Mode

Positioning Toolbar
Insertion Mode

View Toolbar

Scroll Up

Layer Toggle

Source Toggle

Layer Name

Mask Icon

Thumbnail of Source Image

Visibility Icon

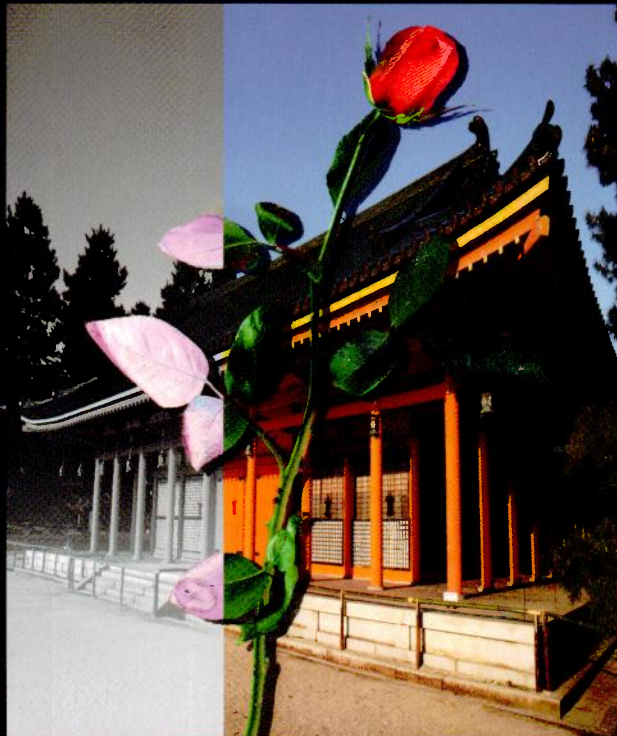
Stencil Icon

Background

In this tutorial you will create a composite named "The Rose". The Rose is constructed as a sequence of lessons as follows:

LESSONS

- 1 Set Up a New Document
- 2 Insert and Position Images
- 3 Create a Gradient
- 4 Silhouette an Image
- 5 Merge Two Composite Images
- 6 Create a Drop Shadow
- 7 Invert the Color of an Image
- 8 Reposition Selected Elements



LESSON 1: SET UP A NEW DOCUMENT

Steps: Launch Live Picture. Use Document Setup to define the initial view and page. Change the name of the initial view.

Reference file: Rose 1

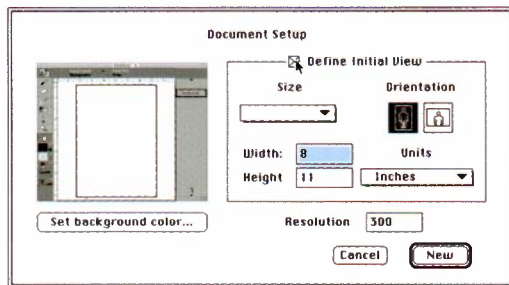
START LIVE PICTURE

1 Double-click the Live Picture icon to start the program.

USING DOCUMENT SETUP

1 Choose Document Setup from the File menu.

The Document Setup dialog box is displayed. This box lets you define the initial view, background color of the workspace, and the resolution in pixels that are assigned to the rulers.



2 Click on the checkbox Define Initial View at the top. Live Picture will create the first view at the dimensions that you now specify.

Views are used to define the page layout in this tutorial.

3 Enter the dimensions of the initial view. Click on the Width box and enter 8. Press Tab, and in the Height box enter 11.

4 Define the units of the initial view. Click on the Units menu and select Inches.

5 Click on the Resolution box and enter 300. This sets the rulers that are used in the workspace to 300 pixels per inch.

6 Press New. A new document is created. You have defined an initial view that will be 8 inches wide by 11 inches high.

The initial view size, units and resolution are saved in the preferences. The next time you wish to create a document using the same settings, select New from the File menu to create the document.

CHANGE THE NAME OF THE VIEW

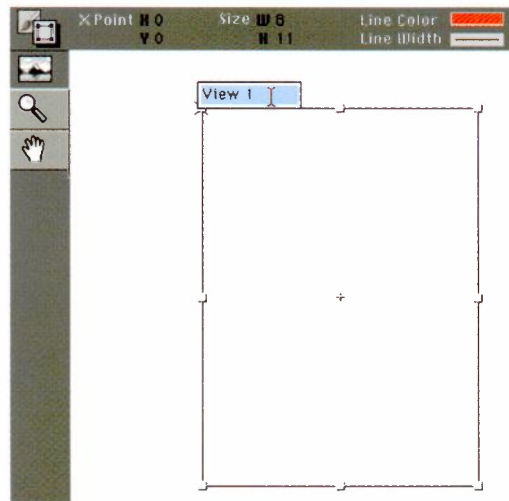
Each view has a name. It is a good practice to assign each view a meaningful name. Since there is only one view in this tutorial we'll name it simply "Rose".

1 Click Add/Edit in the View menu.

Live Picture places you in view mode where you can add, edit, and delete views.

2 Click on the name of the view "View 1".

The view box will be selected and the name field will change color.



3 Type the name "Rose". Press Enter.

4 Click outside the view box to deselect the view.

LESSON 2: INSERT AND POSITION IMAGES

Steps: Open the first image, Temple. Scale and crop Temple. Duplicate the image and transform it to black and white. Copy a stencil and redefine it.

Reference file: Temple Background

INSERT AN IMAGE INTO THE COMPOSITE

1 Select Image Insertion from the Create menu.

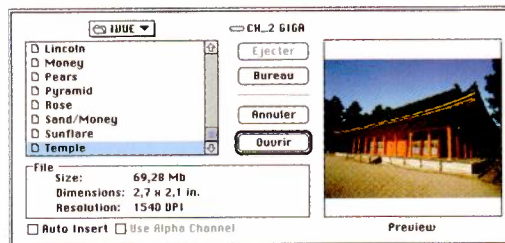
The Open Image dialog box is displayed. You use this dialog box to preview files and select one file to be inserted into the composite.

2 Turn off Auto Insert. At the bottom of the dialog box there is a checkbox named "Auto Insert". If this box is marked with an X then click on it to turn Auto Insert off.

Auto Insert bypasses the positioning tools and opens the image, centers it on the screen, and inserts it automatically at 100% opacity into the workspace. In this exercise you will position the image precisely so the Auto Insert feature cannot be used.

3 Locate the file named "Temple".

Like all the images that will be used in the tutorial, Temple is an IVUE formatted file and is located in the IVUE folder.



4 Double click on the name "Temple" in the list of files to open the file.

Alternatively, you can click one time on Temple and then press Return or click on Open.

SCALE THE IMAGE

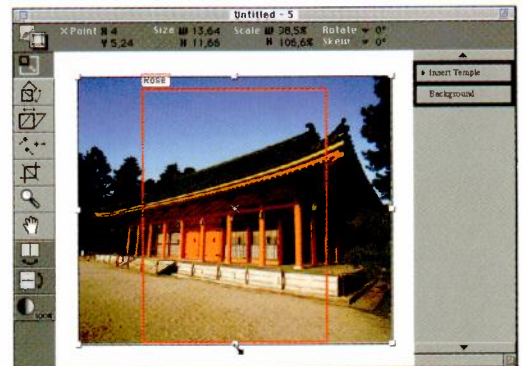
Once you've opened an image, Live Picture switches to the image insertion mode in which a set of image positioning tools are available. You'll use the scaling and cropping tools to fit Temple precisely inside the view.

1 Click on Show Rulers in the View menu. This will display the rulers which are a useful reference for precise positioning.

2 At this point verify a couple things. First, verify that the opacity of the image is set to 100%. The opacity is shown on the opacity button which is at the bottom of the tool bar. If the opacity is not 100% then click on the button and drag out the opacity slider and set it to 100%.

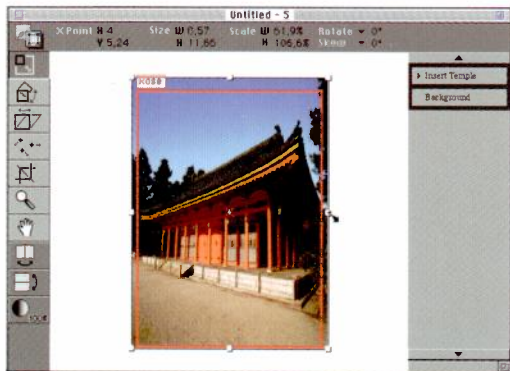
Next, verify that the scale tool, at the top of the tool bar, is selected. If it is not then click on it.

3 Grab the bottom, center handle and scale the image vertically until the bottom of the image just covers the bottom of the view. The image should cover the view on the top and bottom. Don't worry about making it fit exactly. You'll notice that when the cursor is placed on a handle it changes to an icon representing the scale tool.



4 Grab the right center handle and scale the image horizontally inwards until the image just covers the right and left sides of the view.

At this point the image should entirely cover the view. Again, don't try to make it fit exactly.



You can experiment freely with the scaling tool at this point. If you drag one of the corner points then the image retains its X-Y proportion as you scale it. Grab a middle point on either side to scale horizontally. Or grab a middle point on the top or bottom to scale vertically. To return to the original state click on the numerical field Scale W and enter 100, then tab to the Scale H and type 100. Press Enter to apply the rescaling. This returns the image to its original dimensions, 100%, and you can start over.

CROP THE IMAGE

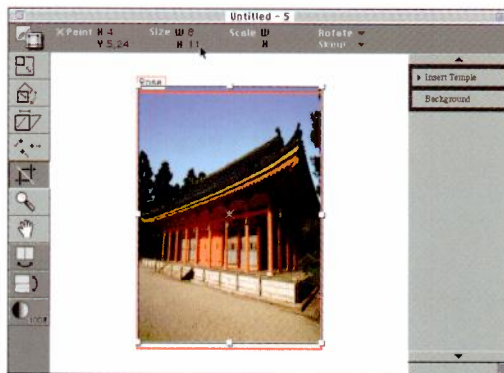
Now that the image has been scaled up and covers the entire view, you'll crop it precisely to the dimensions of the view.

1 Click on the Crop tool (just above the zoom tool). This puts you into cropping mode.

In cropping mode the Size W & H fields (width and height) in the multiplex bar show the dimensions of the cropping window.

2 Click in the Size W field and enter 8 for width. Press Tab and type 11 in the H field for height. Then press Enter.

The image is cropped to the same dimensions as the view. The cropping window lets you view the portion of the image that is within this window. Now we'll move the window precisely over the view.

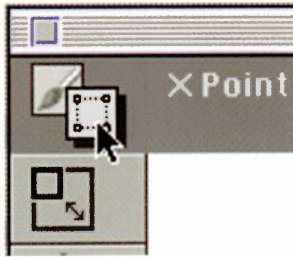


3 Drag the X point to the top left handle. The X Point is marked by a cross and is initially found in the center of the image. Pick it up and drag it to the top left handle of the image. When the X Point gets near to the handle it snaps into place. Release the mouse or stylus.

4 Click in the X coordinate field in the multiplex bar and type 0. Then tab to the Y coordinate and type 0. Then press Enter.

The cropping window will align itself to exactly cover the view. Although the cropping window moves the underlying image does not. Thus, the cropping window defines a rectangular region of the image that is visible.

- 5 Click on the mode switch icon to return to the creative tools.

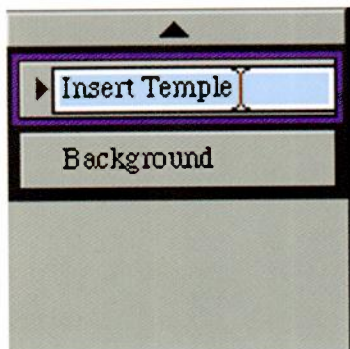


At this point, Live Picture creates both a mask and stencil for the image. The stencil corresponds to the cropping window and defines the visible portion of the image. The mask defines the opacity of the image at each point. Thus, the mask is used to reveal the image. Both the mask and stencil can be modified at any time.

CHANGE THE NAME OF A LAYER

Live Picture has automatically created a layer named "Insert Temple" which is now at the top of the layer stack. The name of a layer can be changed at any time.

- 1 Click once on the layer named "Insert Temple" keeping the cursor inside the layer name. After a moment both words are highlighted. Delete the word "Insert".

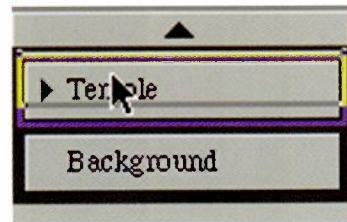


- 2 Press Enter to finish the name change.

Duplicate a Layer and Transform it to Black and White

At this point the layer named "Temple" should be selected. You can distinguish a selected layer as it is framed in blue. If Temple isn't selected then click once inside the layer bar to select it.

- 1 Hold down the Option key and drag the layer named "Temple" slightly upwards. You should notice that the frame changes colors. Release the layer bar and a duplicate layer will be created on top of the previous one. The new layer will be framed.



- 2 In the Layer menu, pull out the IVUE Corrections submenu, select the item Presets and select Black&White.

The top image of the temple turns to Black&White.

- 3 Rename the layer "Temple B&W" by clicking on the layer bar and typing the new name.

REDEFINE A STENCIL

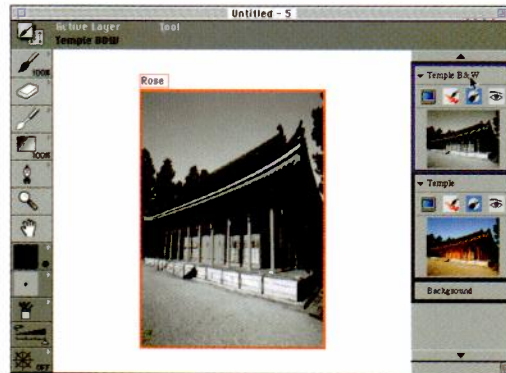
- 1 Hold down the Option key and click on the triangle inside the Temple B&W layer bar.

The two layer bars open up. Each layer bar reveals four icons and a thumbnail of the IVUE image. Note that the thumbnail takes into account any IVUE Corrections. The leftmost icon indicates the layer type, the next icon represents the layer mask, then the stencil icon, and finally the eye indicates whether the layer is visible or invisible (show/hide).

Tip: The first three icons in the layer bar are used to manipulate the layer elements. The layer elements are the source, the mask and the stencil. The source is the basic material of the layer. For example, the source material for Monocolor, Multicolor, Colorize and Artwork layers is paint. The source material for Image Insert, Image Distort, Image Silhouette, and Image Clone layers is a scanned image.

The mask element defines the opacity of the source material at each point in the layer. The mask reveals the source. The source is visible at points where the opacity is greater than 0%. If the mask is 100% opaque then the source is fully visible and it is impossible to see through it to lower layers.

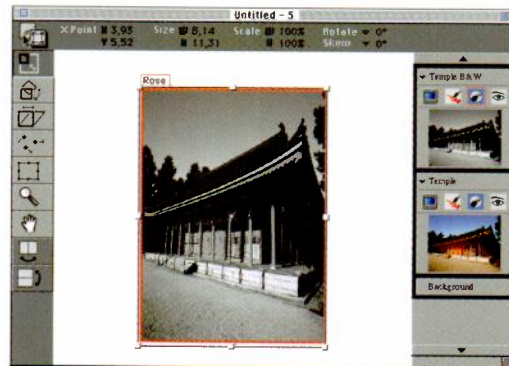
The third layer element, the stencil is not always present. The stencil defines an outline or shape that further constrains the visible area, defining an exterior and an interior region. By dragging down the menu associated with the stencil icon either you can select the stencil's interior or its exterior to be visible, or you can toggle the stencil on and off.



2 Hold down the shift key and click on the black and white thumbnail of the temple to deselect this layer.

3 Hold down the shift key and click on the stencil icon inside Temple B&W. This selects the stencil element only inside this layer.

4 Click on the mode switch icon to switch to positioning mode.



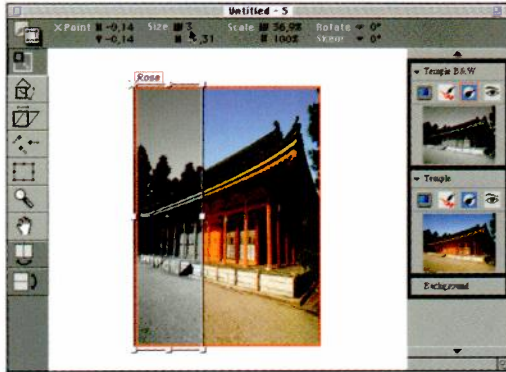
5 Double click on the X-point. The Move To dialog box appears. Type the values 0,0 followed by Enter.

You cannot just drag the X-point to the upper left corner because the cropping stencil is slightly larger than the actual image. Thus the upper left corner of the positioning box does not lie at exactly 0,0.

6 Click on the Size W field in the multiplex bar.

7 Type 3 followed by Enter.

You have redefined the size of the stencil. This has the effect of recropping the black and white image, which took its original crop values from the color Temple. The new stencil lets you see only a 3" strip on the left hand side of the image.



SAVING YOUR WORK

If you want to take a break, or leave Live Picture for any reason, then you should first save your composite. It is also a good idea to save your work frequently to avoid losing work in case of accidents (power outages, knocking over your coffee cup, etc.).

- 1 Choose Save FITS in the File menu.

Live Picture presents a standard dialog box. We assume at this point that you understand the basics of folders and drives on the Macintosh. If you do not then please review these concepts in your Macintosh user manual.

- 2 Create a new folder named "My Rose" inside the Live Picture folder.

- 3 Click on the "Name of document" field and enter the name "Temple Background".

- 4 Press Enter or click on Save.

At this point you can choose to quit Live Picture. To do so, select Quit from the File menu. If a box asking "Save Temple Background?" is displayed you can click Cancel since you have already saved the file.

LESSON 3: CREATE A GRADIENT

Steps: Create a monicolor gradient over the black and white temple.

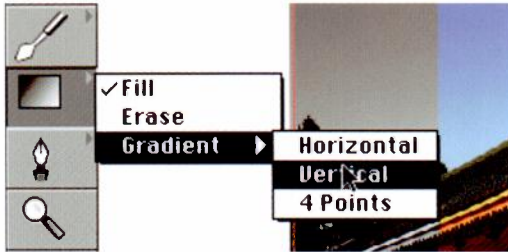
Reference file: Temple Gradient

CREATE A GRADIENT

- 1 If you have closed Temple Background then select Open FITS from the File menu. Enter "Temple Background" at the prompt and click on Open.
- 2 Select Monocolor from the Create menu.
- 3 Select Show Coordinates from the View menu. The X-Y coordinates of the cursor will now be displayed in the upper right hand corner of the screen.
- 4 Click on the color tool and drag out the color bar. The cursor icon becomes an eye dropper. Position the eye dropper over the color white, which you find inside the gradient strip in the color bar. This is the strip that runs above the color bar itself and the RGB/HSV values, you'll always find white. Note that exact RGB value for white is R=255, G=255, B=255. Or you can select a white from anywhere on the screen it may be.



5 Click on the marquee and select Gradient/Vertical.



6 Now drag out a gradient box from approximately the point $x=0$, $y=5$ to the point $x=3.3$, $y=11.5$. To do this you position the cursor to the first point ($x=0$, $y=5$) then you click and holding down the stylus or mouse button you drag out the rectangle downwards and to the right until the coordinates are approximately ($x=3.3$, $y=11.5$) and then release the mouse. If the box doesn't look something like the picture then click outside the gradient box and try again.

7 Click on the top value (100%) and drag out the slider to the right to the value 0%.



8 Click inside the gradient box to apply the white gradient. Click outside the box to deselect it.

9 Rename the top layer bar to "Gradient" by clicking on the layer bar and typing the new name.

COPY A STENCIL

The white gradient overlaps the color temple, which looks messy. So now you'll use a stencil to clean this up.

1 Click on the triangle inside the top layer bar to open it.

The top layer bar is named Monocolor 'n'. The 'n' is a number that increases with each new layer that you create.

2 Option drag the stencil icon of the layer named "Temple B&W" on top of the stencil icon for the layer "Monocolor n". Release the icon. The stencil, copied from the black and white image, is now used to constrain or trap the white gradient.

As a reminder, option drag means to hold down the option key and drag an object. You copy a stencil from one layer to another by option dragging its stencil icon on top of the other layer's stencil icon. You'll notice two things. First, when you option click on the stencil icon it is immediately framed in red. Then, the stencil icon that you drag to changes color to show that the copy operation can be performed.



3 Select Save FITS from the File menu. Type the name "Temple Gradient" and press Enter to save the composite. Again, the FITS file should be saved in the Rose folder.

4 Select Close from the File menu.

You've now created a composite background image that combines two images and to which you've added a white gradient. This image will be used as the background in the following lessons.

LESSON 4: SILHOUETTE AN IMAGE

Steps: Create an Image Silhouetting layer by inserting "Rose". Use auto masking to silhouette the image. Retouch the mask.

Reference file: Rose Masked

Live Picture's automatic brush silhouetting is one of its most powerful features. There are many possibilities and options that you will want to explore. But for this tutorial we'll work with a relatively simple example of a rose on top of a blue background.

We can't tell you exactly how to use a brush so it is likely that your results will vary somewhat from ours. However, if at any point your results are very different from what you see here then just start over.

CREATE A NEW DOCUMENT

We'll create a new document using the document setup settings that were previously defined.

1 Choose New from the File menu.

A new window is created that uses the document setup settings that were defined in the last step. This is important because when we later merge the two files they will have a common layout.

2 Choose Hide all from the View menu.

During silhouetting it's always better to work with an uncluttered screen so we turn off the initial view at this point.

OPEN THE IMAGE TO BE SILHOUETTED

- 1 Select Image Silhouette from the Create menu.

The Open Image dialog box appears.

- 2 Click on the Auto Insert check box to turn it on.

Auto Insert is a fast way to bring in images. It bypasses the positioning tools and brings in the image at 100% opacity and centers it in the middle of the screen.

When you silhouette an image it must be entirely visible on the screen. You cannot pan or zoom during the actual image silhouetting. This approach lets you silhouette images very quickly. After the silhouetting mask is computed then you can pan and zoom freely to retouch it.

- 3 Double click on the filename "Rose" to open the image.

MASK THE OUTSIDE OF THE IMAGE

There are four steps in silhouetting: (1) define the outside of the region to be silhouetted, (2) define the region to be silhouetted, (3) retouch the mask, (4) compute the mask. In fact, you can move freely between steps 1-3, changing, revising, improving the mask, before computing.

In the following steps we will assume that you are using a pressure sensitive stylus. It is possible to use a mouse but it is not nearly as effective.

- 1 Click on the Tolerance level in the multiplex bar and drag it to 40%.

The default setting is 40% but you can click and drag just to get acquainted with this most important option. A higher tolerance means that more colors are selected when you brush. A lower tolerance selects fewer colors.

If you hold down the shift key while dragging the opacity value moves in increments of 10.

- 2 Click on the Outside color box, just to the right of the word "Outside" in the multiplex bar.

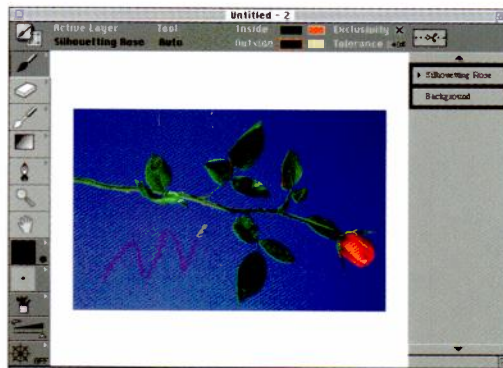
This indicates that we are going to define the exterior region. First we'll define the outside, or exterior of the mask. This is the color or range of colors that will not be included in the mask. With the rose, it's easiest to first define the mask outside, or exterior, because it is a solid blue.

- 3 Click on the color menu to the right of the word "Outside" and just to the left of "Tolerance" on the multiplex bar and select the color yellow.

We don't want to use the color green since the object we are masking, the rose and its stem, contains green. It's best to pick a color that strongly contrasts.

- 4 Click on the brush. If you click the brush and hold for a moment the options menu will open. Verify that the Auto option is selected.

- 5 Draw a squiggly line in the bottom left of the image making sure to stay in the blue region and carefully avoiding the green stem. With this action you are selecting a range of colors that will be included in the mask exterior.



When you pick up the stylus Live Picture will change the blue background to yellow for all colors in the selected range contained in the image. If you made a mistake and touched the green or red part of the rose then use Edit Undo Brush stroke.



5 If not all the blue has been covered then paint over the blue areas not yet covered.

Continue until all blue areas outside the rose have been painted.



MASK THE INSIDE OF THE ROSE

1 Click on the box next to the word Inside in the Multiplex bar.

The red box will surround the word Inside.

2 Make sure that Exclusivity is set to On. The box should be checked.

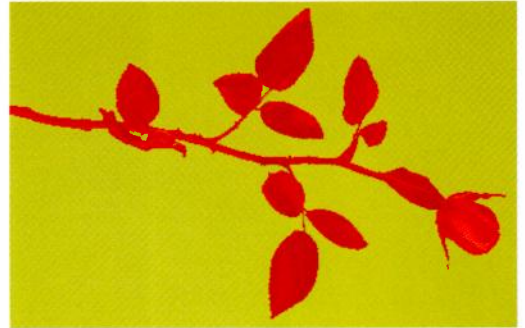
Exclusivity On means that no part of the image exterior will be included in the interior mask that you are now going to create.

3 Set the Tolerance to 100%.

With Tolerance set to 100% as you brush, all colors will be included in the mask.

4 Brush over the rose.

You don't have to worry about brushing outside, in the yellow area since we've set the exclusivity check. The rose should now be covered with transparent red.

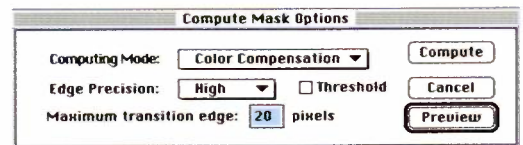


5 Click on the Compute icon (scissors cutting dashed line) on the multiplex bar.

The Compute Mask dialog box appears.

6 Set the mask parameters and click on Preview.

The parameters to be used are: Computing Mode: Color Compensation, Edge Precision: High, Threshold: Off, Maximum Edge Transition: 20 pixels.



Tip: The color compensation option is a unique masking feature. It ensures that the masked image will merge nicely with any background. It does this by color compensating the edge of the masked image to slightly reflect the ambient background color. Images silhouetted with this feature will not look "cut out" when they are composited with very different backgrounds.

Live Picture performs a rapid computation of the mask, at screen resolution, and displays the result.

7 Click on Retouch.

RETOUCH THE MASK

It is quite common for an object to contain traces of the color of its surroundings. If you look closely you'll see that the leaves and stem of the rose contain many colors and color variations. You'll see red, areas of rust orange and reflected blue of the background on the leaves and stem. This can cause problems for automatic silhouetting systems since it is difficult to determine where the boundary of an object is if the same color is found both inside and outside of it.

The retouching step lets you intervene in trouble spots to make minor modifications to the mask, before initiating the final computation.

1 Select the smallest brush from the Tool Size pull out menu.

2 Click on the brush tool. The brush opacity should be set to 100%. If not, then drag out the opacity slider and set it to 100%.

3 Now, brush slowly and selectively over the leaves and the flower. Please be careful in this step, but you shouldn't need to spend more than a few minutes.



To compensate for the color variations, it is best to brush just a little bit on each of the leaves. This forces the mask to 100% opacity. However, you don't have to brush more than once on the leaf and you must be careful not to go outside the leaf; otherwise you'll bring back the blue background.

4 If necessary, use the eraser to eliminate the blue background. Click on the eraser button and then brush carefully on areas where the blue is present.

For example, in this image we've found that there is often a trace of blue around the clipped base of the rose stalk, on the far left. This should be eliminated using the eraser.

5 Click on the Compute icon on the multiplex bar. The Compute Mask dialog box appears.

6 Click on Compute.

At this point Live Picture will compute the full resolution mask. A small square will zip across the screen, showing you the line that is being computed. This may take a couple minutes (depending on what model Macintosh you're using).

7 Change the name in the layer bar to "Rose".

8 Click on Save FITS in the File menu.

9 Enter the name "Rose Masked" and click on Save.

10 Click on Close in the File menu. The file is closed.

LESSON 5: MERGE TWO COMPOSITE IMAGES

Steps: Open Temple Gradient. Merge the Rose on top of it. Scale and rotate the rose. Center the rose within the view.

Reference file: Rose Merge

MERGE TWO COMPOSITES

At this point you've created two different composites, the silhouetted rose and the temple background, each saved in a different file. Now you'll merge the two files to produce a single composite.

***Tip:** We could have inserted and silhouetted the rose directly on the temple background. However, the fact that we've created a separate file for the rose means that we can use it in any composite. This is similar in concept to an alpha channel, however, with the important advantage that a FITS mask is resolution independent. Thus it can be inserted and used in any size composite.*

OPEN A FITS FILE

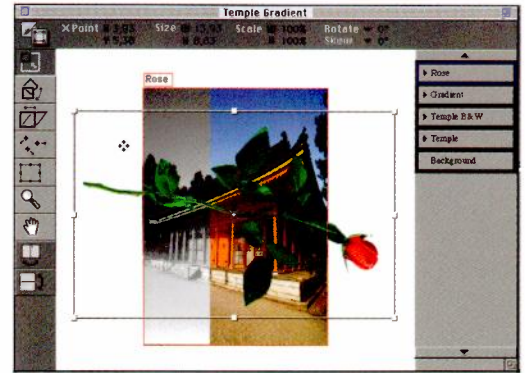
- 1 Click on Open FITS in the File Menu.
- 2 Double click on the file named "Temple Gradient" to open it. You will find Temple Gradient in the folder named "My Rose" where you saved it.

Live Picture opens and displays Temple Gradient.

- 3 Select Merge from the File menu.

In this case, the option Fit to Window is not necessary and should not be checked, since both composites were created using identical views.

- 4 Double click on "Rose Masked" to merge the silhouetted rose on top of the Temple Gradient.



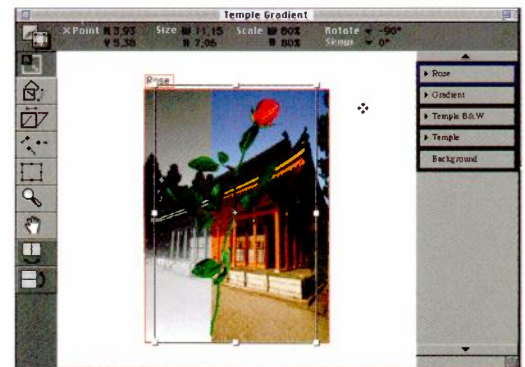
- 5 Tab to or click inside the field Scale W and type 80. Tab once to the Scale H field and type 80. Tab once more and type -90. Then press enter to execute the scale and rotate commands.

This scales the rose to 80% of its actual size, relative to the layout dimensions and resolution (as defined in the document setup) and rotates it 90° counterclockwise.

The Rose should be centered nicely inside the positioning box. If it is not then simply drag it to the center of the view.

- 6 Click on Save FITS As... in the file menu.

- 7 Enter the name "Rose Merge" and click on Save.



LESSON 6: CREATE A DROP SHADOW

Steps: Use the gradient tool to create a 70% black filled area. Define the shape of the shadow using the rose mask. Reposition the mask and move the shadow behind the rose.

Reference file: Rose Shadow

There are many ways to create drop shadows in Live Picture. We'll use perhaps the simplest method in which you copy the mask the mask that you've previously created. Then you'll use the mask within a monicolor painting layer and fill it with transparent black.

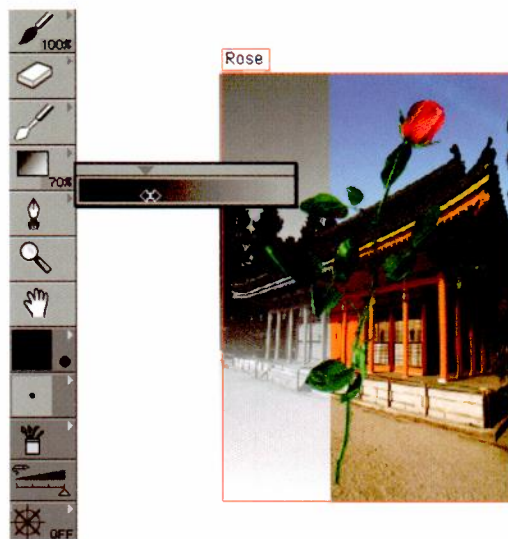
1 If it is not already open then click on Open FITS in the File Menu and select Rose Merge. It should be in the My Rose folder.

2 Select Monocolor in the Create menu. A new layer is created.

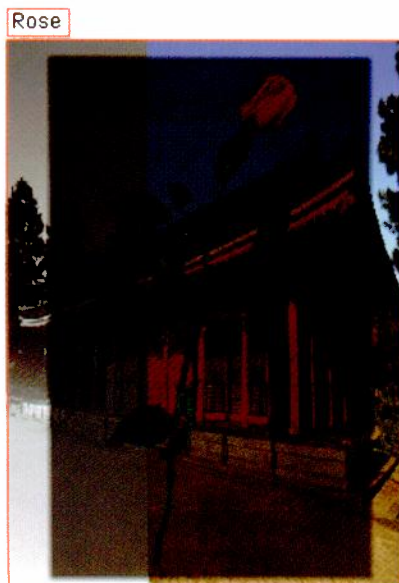
Notice the color selector. If it not black then set it to black by dragging out the color bar and picking black off the gradient strip or anywhere else on the screen.

2 Click on the marquee button and pull out the options menu. Verify that it is set to the Fill tool. Then click on the opacity slider at the bottom of the button and drag to 70%.

Remember that by simultaneously holding down the shift key you constrain any slider to move in increments of 10.



3 Click on the marquee and drag out a rectangular box that entirely covers the rose. If you make a mistake and the marquee area doesn't entirely cover the rose then select Undo from the Edit menu and try again.



4 Hold down the option key and click on the triangle in any layer bar.

All of the layer bars will open up.

5 Option drag the mask icon in the Rose layer to the stencil icon in the Monocolor layer above it.

When you option click on the mask icon it is framed in red. And the stencil icon in the Monocolor layer will change color when the Rose mask is positioned on top of it.



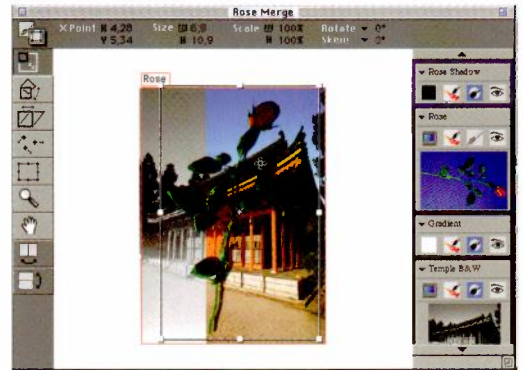
Tip: If we had copied the mask from the Rose layer to the mask of the monocolor layer the shadow would have become opaque, i.e. it would have lost the 70% opacity setting. This is because the mask of a silhouetted image is 100% for the interior region. When a mask is copied to a stencil the outline of the object is extracted and becomes the stencil. The existing mask, which in this case is 70% opaque, is retained.

6 Change the name of the monocolour layer to “Rose Shadow”.

At this point the Rose Shadow layer should be selected.

7 Click on the mode switch icon to change to positioning.

8 Drag the monocolour layer slightly to the right to give the effect of a shadow.



9 Click on the mode switch icon to return to the creative tools.

10 Drag the top layer bar, Rose Shadow, down between the Rose and Gradient layers.

The Rose Shadow layer is moved below the rose. When the screen redraws you'll see that the rose shadow is now behind the rose.

11 Select Save FITS As... from the File menu. Enter the name “Rose Shadow” and click on Save.

12 At this point, you can close the file using the command Close in the File menu.

LESSON 7: INVERT THE COLOR OF AN IMAGE

Steps: Duplicate the layer containing the silhouetted rose. Use IVUE Correction to invert the copy.

Reference file: Rose Final

MAKE AN INVERTED COPY OF THE ROSE

You've already used one IVUE color correction, the black and white preset. Now you'll use a second to invert the Rose.

1 If it's not already open, use the Open FITS command in the File menu to open the file "Rose Shadow".

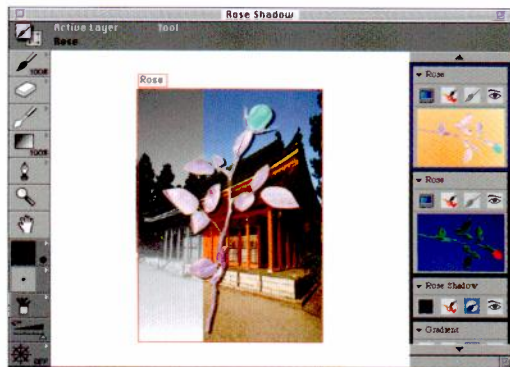
2 Hold down the option key and click on the arrow key in any of the layer bars.

All layers open immediately.

3 Duplicate the Rose layer by holding down the option key, clicking on the Rose layer and dragging it upwards slightly, until the frame changes color. Release the pen or mouse and a copy of the Rose layer is placed at the top of the layer stack.

4 Select Invert from the IVUE Corrections submenu found in the Layer menu.

The top Rose image is immediately inverted.

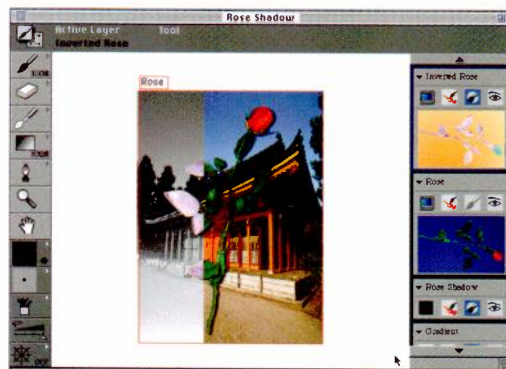


5 Click in the name field of the top Rose layer and change the name to Inverted Rose. Press Enter to complete the name change.

Tip: Invert and all the other IVUE Corrections act on a single IVUE image. The color correction is applied to the selected image, i.e. the image that is framed. No other layers are affected. You can remove the correction at any time using the command Undo Corrections that is found in the IVUE Corrections submenu. Undo Corrections will remove all IVUE Corrections that have been made to an image. But they will not affect IVUE Corrections made to other images.

6 Option drag the stencil icon from the layer named Temple B&W to the Inverted Rose stencil icon.

In doing this you copy the stencil from the black and white temple to the inverted rose image. The stencil was a rectangle covering the left part of the composite only. As a result, you will only be able to see the inverted rose within this stencil, against the black and white temple.



7 Save the composite. Click on Save FITS As... in the File menu. Name this image "Rose Final."

At this point you've created the final image. But rather than stop here we'll go on and see some of the interesting properties of this image.

LESSON 8: REPOSITION SELECTED ELEMENTS

Steps: Select two layers and the source and mask in another layer to be repositioned. Move the selected elements and observe the result.

Reference file: Rose Final

Quite often, after completing a version of your project, your client may decide to change the position, size, or color of one of the elements in the composite. Due to its unique layering capability, Live Picture lets you make such changes immediately, on the spot. Layers give you flexibility to modify any element of your work at any time.

In this lesson you'll learn how to reposition the rose and its shadow.

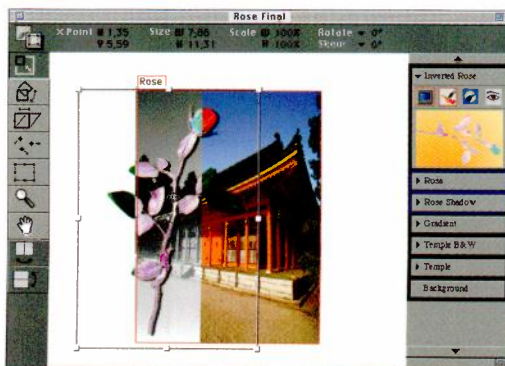
1 If it's not already open, use the Open FITS command in the File menu to open the file "Rose Final".

2 Hold down the option key and click on a triangle in any of the layer bars, to close all the layers.

All the layer bars will close at once.

3 Click on the Inverted Rose layer triangle to open the layer.

4 Shift click on the Rose Shadow layer, the Rose layer. Then, while still holding down the shift key, hold down the option key and click on the source and mask elements in the Inverted Rose layer.



To remind you, shift click means to hold down the shift key and click successively on one or more elements.

5 Click on the mode switch icon to switch to positioning mode.

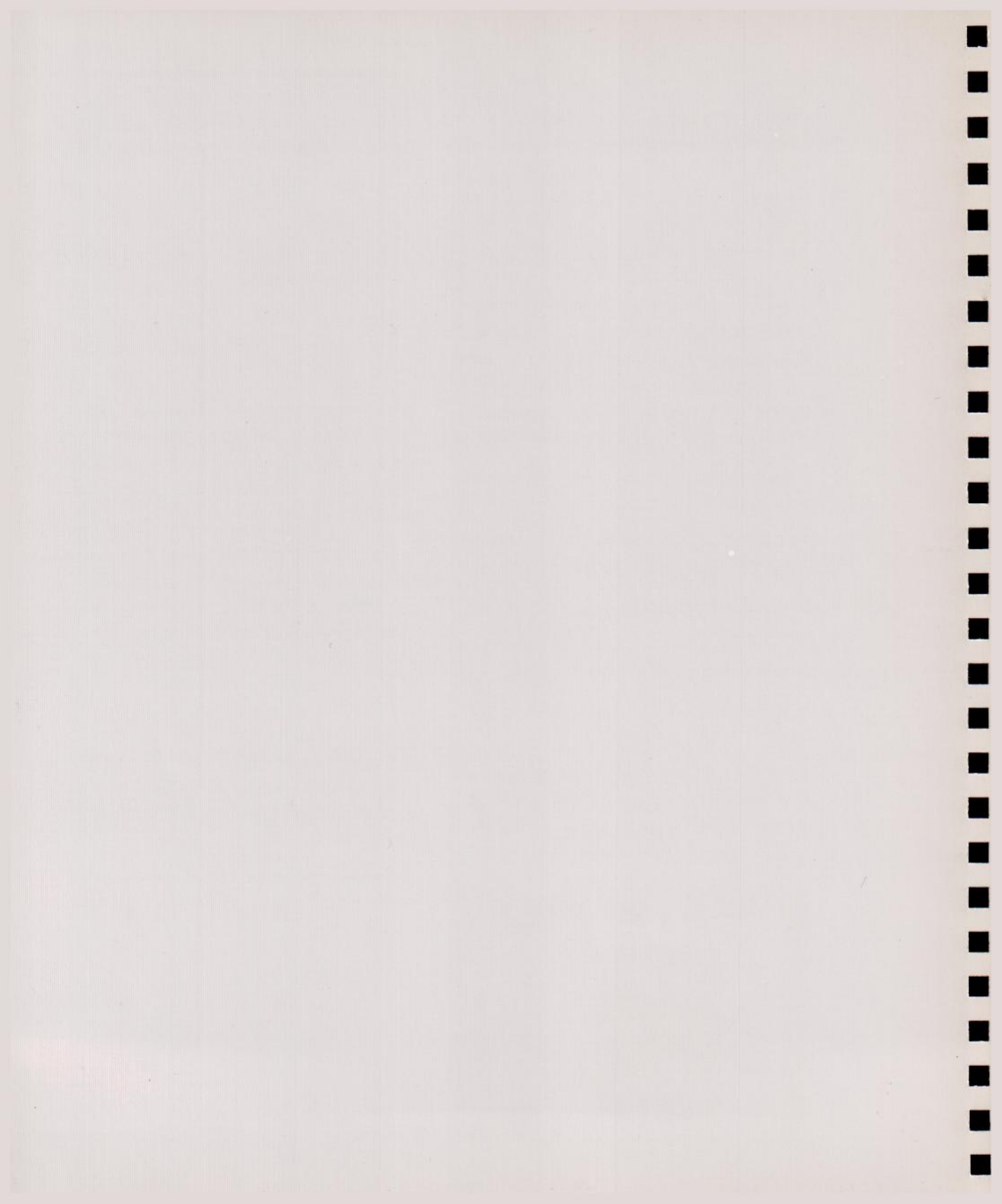
The positioning tools appear in the tool bar and a positioning box appears around the rose.

6 Move the rose and shadow around by simply placing the cursor inside the positioning box and dragging the image.

You can use any of the positioning tools, scale, rotate, flip, etc. at this point. Just take your time and experiment with the positioning tools. Of course you'll notice that the Rose appears inverted within the black and white box and everywhere else it is normal.

The secret to this effect is that the inverted Rose is on top of the normal Rose but it is constrained by its stencil, which does not move. Because we did not select the rectangular stencil of the inverted Rose to be repositioned, the inverted Rose is only visible within its rectangular stencil. Everywhere else we see the normal Rose. The shadow is in a different layer and is not entirely covered by the inverted Rose so it moves freely across both sides of the image. Of course the Rose layer also moves freely, but within the rectangular stencil on the left it is always obscured by the inverted Rose.

You've now completed the Rose tutorial. You can use this completed image as a starting point to create your own variations.





In this tutorial you will create a composite image named "Earth Project". First, the background for Earth Project is composed from three images: Cityscape, Sunflare and Ferns. On top of the background, three objects are individually built: **1** a beveled glass paperweight, **2** the planet earth, and **3** a text logo. Finally, the three objects and the background are merged.

LESSONS

- 1** Set up a new document.
- 2** Insert the image Cityscape, color correct and retouch it.
- 3** Insert two additional images: Sunflare and Ferns, color correct them and blend them using opacity gradient to finish the composite background.
- 4** Create a beveled glass paperweight shape using bezier paths.
- 5** Silhouette an image, Earth, using bezier path tools and correct it.
- 6** Create a text logo using path tools.
- 7** Assemble the composite image by merging the intermediate images.

LESSON 1: SET UP A NEW DOCUMENT

Steps: Launch Live Picture, use Document Setup to define the initial view and page. Edit the initial view.

Reference file: Earth A

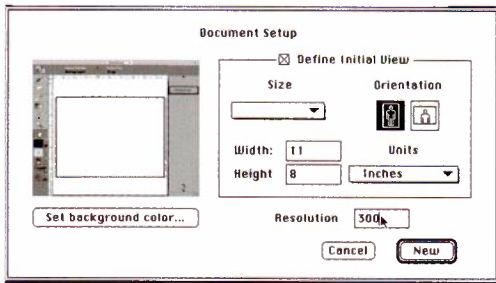
START LIVE PICTURE

1 Double-click on the Live Picture icon to start the program.

USING DOCUMENT SETUP

1 Choose Document Setup from the File menu.

The Document Setup dialog box is displayed. This box lets you define the initial view, background color of the workspace, and the resolution in pixels that are assigned to the rulers.



2 Click on the checkbox that precedes the text “Define Initial View.” Live Picture will create an initial view at the dimensions that you now specify.

3 Enter the dimensions of the initial view. Click on the Width box and enter 11. Press Tab, and in the Height box enter 8.

4 Define the units of the initial view. Click on the Units box and select Inches.

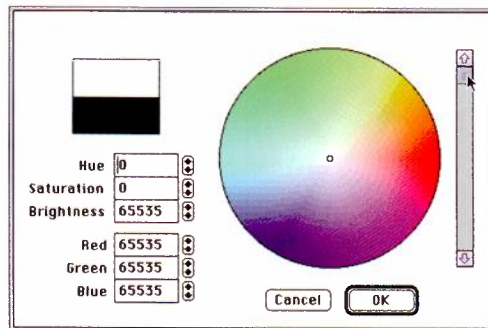
5 Click on the Resolution box and enter 300. This defines the value, in pixels, of each unit of the rulers. By setting the resolution to 300, and choosing inches, the rulers will have a value of 300 pixels per inch.

Tip: Set the size and resolution to match your output device and page format. For example, if you are outputting an 8X10 inch image to a transparency device at 1000 dpi, you should set your page accordingly. In this example each inch on the ruler would equal 1000 pixels.

Setting the resolution of the ruler does not affect the image data in any way. It will, however, let you see the amount of scaling applied as you resize the image in the layout. For example, if the scaling is 100% then you'll have one pixel on output for every input pixel. If the scaling is 200% then you'll have two pixels on output for every pixel in the original scanned image.

6 Click on the button named “Background Color”. The Apple Color Picker appears. Click on the slider on the right hand side of the color picker and drag it all the way to the top. Click OK.

This sets the background color for the composite to white. In fact, in Earth Project the background color has no effect on the final composite. However, in many other composites it will be vital.



7 Click on New or press return. A new document is created. You have defined an initial view that will be 11 inches wide by 8 inches high.

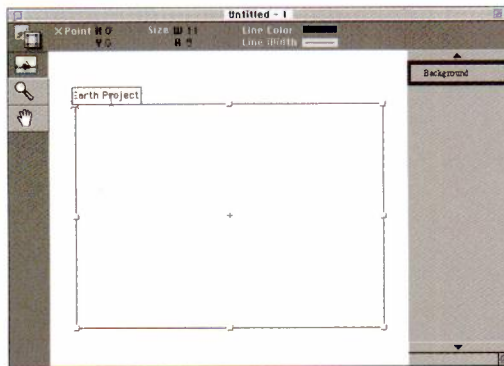
This document setup information (initial view size, units and resolution) is saved in the preferences file. Subsequently, if you select New from the File menu, rather than Document Setup, Live Picture will create a new document using these parameters.

CHANGE THE NAME OF THE VIEW

In this tutorial we will rename each view. Like Macintosh file names, the name of a view can be up to 33 characters. You edit a layer name in the same way that you change a file name. Click on the name and wait a second or two without moving the mouse or stylus, then you can type a new name.

1 Click Add/Edit in the View menu. Live Picture places you in View mode where you can add, edit, and delete views.

2 Click once on the name of the view ("View 1"). The box will change color. Type "Earth Project" and press Enter. The view is renamed accordingly.



3 With the layer still selected, pull down the Line Color menu in the multiplex bar and select the color red. Click outside the view and the view box will change to red.

Tip: You'll want to change a view's color when it does not adequately contrast with the background. Once the view is activated, by clicking on it, you can change the size of the view by dragging one of the handles or directly entering the values in the multiplex bar.

4 When you're finished editing the view, click on the mode switch icon to return to the creative tools. Clicking on the mode switch icon toggles between the positioning and creative tool sets. If you are inserting an image and the image insertion tools are displayed then the mode switch icon will take you to the creative tools.



Note: the terms image insertion tools and positioning tools are used interchangeably. In fact, when an image is inserted there are two additional tools, cropping and opacity that are not available later, when repositioning layers and layer elements. Conversely, there is one tool, the positioning box, that is not available when the image is initially inserted.

LESSON 2: INSERT, COLOR CORRECT, AND RETOUCH THE FIRST IMAGE

Steps: Insert Cityscape, convert the image to black and white and then apply a posterized effect. Retouch parts of the image using the painting tools.

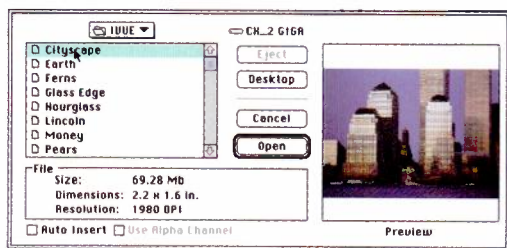
Reference file: Earth B

OPEN THE IMAGE: CITYSCAPE

1 Select Image Insertion from the Create menu.

The Open Image dialog box is displayed. You use this dialog box to preview files and select the file to be inserted into the composite.

2 Verify that the Auto Insert option, at the bottom of the dialog box, is turned off. If this box is marked with an X then click on it to turn Auto Insert off.



Tip: Using the Auto Insert feature positions the image in the center of the screen and inserts it at 100% opacity. It is especially useful for image silhouetting, where the image should be as large as possible. When auto insert is turned off, the image is inserted and the insertion tools are available.

However, for precise positioning and layout you should turn this option off.

3 Select the file named “Cityscape”.

Cityscape is an image file, in IVUE format, that is provided on the Portfolio Disk. It is located in the IVUE folder along with all the other IVUE images used in the tutorial.

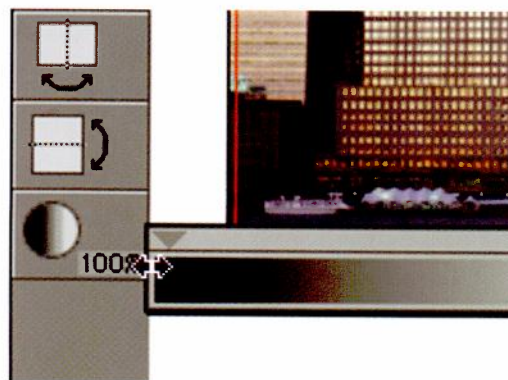
4 Click on “Cityscape” to open it.

CROP AND POSITION AN IMAGE

The image is opened and Live Picture enters the image insertion mode with its own set of tools. You’ll use the scaling and cropping tools to lay out Cityscape precisely inside the view.

1 Click on Show Rulers in the View menu. This will let you see the dimensions that you’re working with. Rulers are necessary for precise positioning. We won’t repeat this step in the tutorial. However, we suggest that while working on this tutorial you turn on the rulers each time you begin a new lesson.

2 Verify that the opacity is set to 100%. The opacity button is at the bottom of the tool bar. If the opacity percentage value is not 100% then click on the button and drag out the opacity slider. Drag the slider to the far left and release.



3 Move the cursor directly on top of the X Point and drag it to the top left handle of the image.

The X Point is the fixed reference point that is used for scaling, rotation, skewing, cropping and flip operations. It is represented on the screen by the X icon that is initially located exactly in the center of the image. When you move the X Point close to a handle or to the center of the image it snaps into place.

4 Click on the X coordinate (the value next to the word X Point in the multiplex bar). Type -5 . Press Tab to move the Y coordinate field. Press 0. Press Tab three times to position to the Scale W field in the multiplex bar. Type 90. Press Tab and then type 90 again.



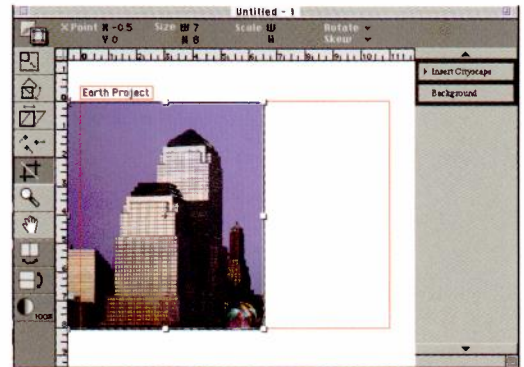
5 Press Enter. This moves the upper left corner to the point $(-5, 0)$ in the workspace coordinate system and simultaneously scales the image to 90% of its scanned size.



6 Select the crop tool. Now click on the Size W parameter in the multiplex bar. Type the value 7. Press Tab to move to Size H. Type 8. Press Enter.

A cropping window 7" wide by 8" high is created on the left side of the view. Only the part of Cityscape that can be seen through this cropping window is visible.

Tip: The cropping window defines the visible portion of an image. The entire image is still available and the cropping window can be changed at any time. Note however, that the cropping window is implemented as a rectangular stencil. So, to modify the cropping window later you will select the layer's stencil and then use the positioning tools.



7 Click in the X coordinate in the multiplex bar and type 0. Press Enter.

The cropping window moves .5 inches to the right.

8 Click on the mode switch icon to go to the creative tools.

There is a brief delay while Live Picture creates a stencil that takes into account the positioning and cropping information. The stencil can be modified at any time.

9 Click on the name field in the layer bar that says "Insert Cityscape". You edit a layer name in the same way that you edit file and folder names on the Macintosh. You click and then wait a moment. The name field changes color and you can edit the text.

10 Type the name "Citybg." Press Enter. The "bg" in "Citybg" reminds us that this layer is used in the composite background.

APPLY AN IVUE CORRECTION: CHANGE TO BLACK AND WHITE

In this step you'll use an IVUE Correction to change Cityscape to a black and white image.

The IVUE Corrections are found in the Layer menu. Any number of IVUE Corrections can be applied to a single IVUE image. Their effect is cumulative. It is possible to remove all the corrections made to a single image using the Undo Corrections command. When this command is used, all the corrections made to the IVUE file are removed. It is not possible to selectively undo a single correction if more than one correction has been applied.

1 Click once on the layer bar named "Citybg" to select it. It will be framed in blue, indicating that the layer is now selected.

2 Select IVUE Corrections from the Layer menu, and then open the Presets submenu and select Black&White.

The Cityscape image will turn to black and white and the image will be redrawn on the screen.

Tip: If the Presets menu item is grayed out (i.e. you are not able to open it) it is because the Presets folder, which contains the color preset files, has not been defined correctly in the preferences. In this case, use the Files & Folders preferences to define the location of the Presets folder.

POSTERIZE AN IMAGE

Now we'll use the Color Steps function to "posterize" the image - i.e. to reduce the number of black and white levels.

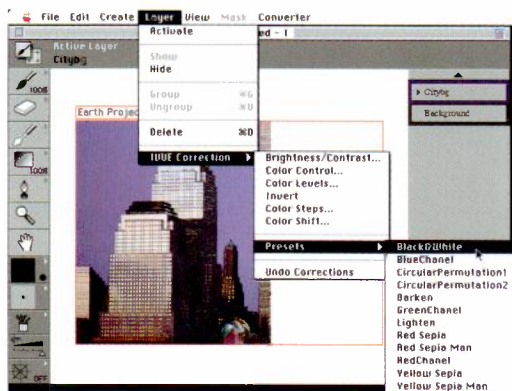
1 Select Color Steps from the IVUE Corrections submenu, which is found in the Layer menu.

The Color Steps dialog box opens. This IVUE Correction contains a before and after preview. On the top left you see the original scanned image along with any IVUE Corrections that have been performed up to this point.

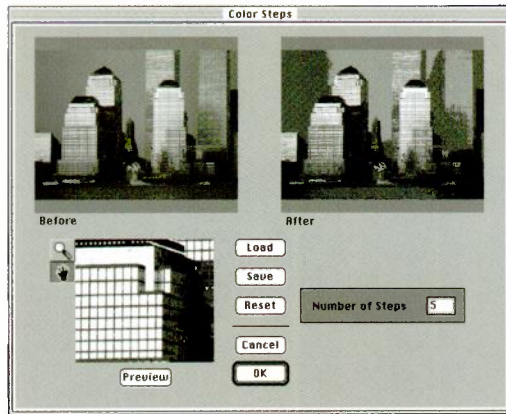
To the right you see the image after the color correction is performed. In the bottom left you see the effect on the composite image after the effect is applied. You must click on Preview to update this FITS preview. You can pan and zoom within the preview by first clicking on the appropriate tool.

2 With the cursor positioned inside the box that reads "Number of Color Steps" double click to highlight the entire box. Type the number 2. The After preview window will immediately register the change. Double click again and enter the number 5. Again the After preview window will again update to show the change.

3 Click on Preview to see the effect on the composite FITS file. Select the zoom tool (magnifying glass) and drag out a small rectangle in the center of the preview



window. This has the effect of zooming into the composite. The rectangle defines the new window. To zoom back out, hold down the option key and repeat the procedure. Feel free to experiment with this feature at this point.



4 Click OK to apply the color correction to the IVUE file.

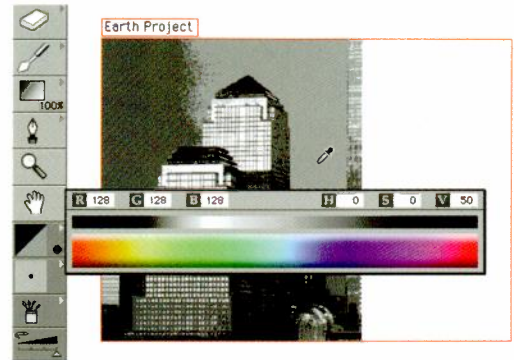
USING PAINTING TOOLS TO RETOUCH AN IMAGE

Next you'll use the painting tools to eliminate the building that bleeds off the right.

1 Select "Monocolor" from the Create menu.

This creates a new monocolor painting layer and inserts it on top, above Citybg. In monocolor painting you can paint with just a single color. The advantage is that all painting in a monocolor layer can be changed to another color at any time. This is not possible in a Multicolor layer.

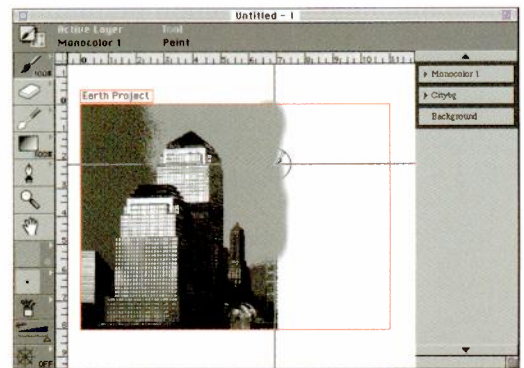
2 Click on the color selector and drag out the color bar. The cursor transforms into a color picker. Select the light gray sky color.



3 Click on the tool size button and drag out the tool size palette. Select the third smallest brush (third brush from the right).

4 Now click on the brush tool button. There is only one option so you don't need to worry about selecting a tool from the brush popup menu.

5 Brush carefully over the building on the right of the image. Leave about 3" of the building showing at the bottom. Don't worry if the gray spills outside of the image. We'll take care of that later. Select the eraser tool, and erase to clean up any mistakes. A shortcut for using the eraser is to hold down the command key. This turns the brush into an eraser.



6 Now click once in the layer bar "Monocolor n" (n is a number). Change the name of the layer to "Skygrey."

CLEAN UP THE OVERSPRAY

- 1 Open the layer bar by clicking on the triangle to the left of the word “Skygrey”.
- 2 Open the Citybg layer bar using the same procedure.
- 3 Holding down the option key drag the stencil icon in the Citybg layer bar on top of the stencil icon in the Skygrey layer just above.



The spillover from your painting will be eliminated, i.e. it is cropped within the rectangular stencil that was created for Citybg.

SAVING YOUR WORK

- 1 Select Save FITS from the File menu.
- 2 Create a new folder named “My Earth Project” inside the Live Picture Folder. We suggest that you save this file and all subsequent intermediate files in this folder.
- 3 Click in the “Name of document” field and type the name Earth B.
- 3 Press Enter or click on Save to save the FITS file.

LESSON 3: INSERT, COLOR CORRECT, AND RETOUCH THE SECOND IMAGE

Steps: Insert, position, crop the Sunflare and Fern images. Create a graduated blend between the two images. Color Correct both images, using IVUE Corrections.

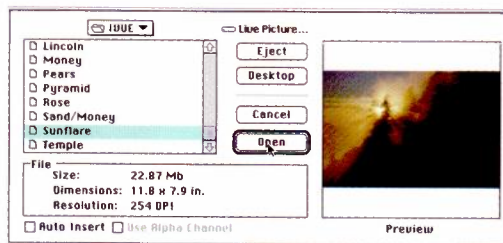
Reference file: Earth Background

We'll assume in this lesson, and in future lessons, that you're already in Live Picture, and that the previous image (Earth B in this case) is open and displayed on the screen. If this is not the case, then start Live Picture and use the Open FITS command to open Earth B, which you created at the close of the previous lesson.

INSERT THE SUNFLARE IMAGE

- 1 Select Image Insertion from the Create menu.

Verify that the Auto Insert check box at the bottom of the Open Image dialog box is off. If this box is marked with an X then click on it to turn Auto Insert off.

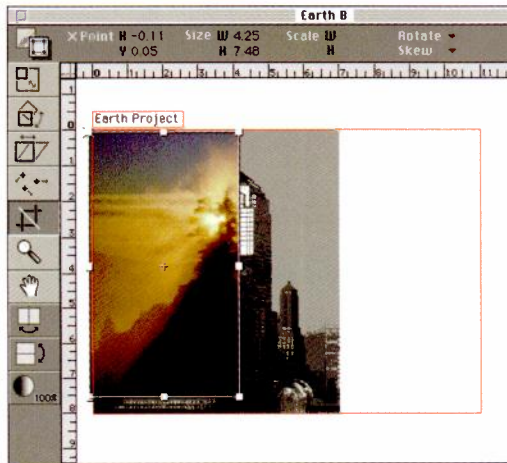


- 2 Double click on the file named “Sunflare” to open it. The image is opened and Live Picture switches to the image insertion mode in which the insertion/positioning tools are available.

CROP AND POSITION SUNFLARE

You'll use the scaling and cropping tools to fit Sunflare into the upper right hand portion of the composite. If the rulers are not turned on then you should select Show Rulers from the View menu at this point.

- 1 Drag the X Point to the top left handle of the image.
- 2 Click on the crop tool.
- 3 Click in the Size W field in the multiplex bar. Type the value 4.25 and press Enter. The Sunflare image is cropped to 4.25 inches in width.



- 4 Click in the X coordinate and type 2. Press Enter.

The cropping window will shift 2 inches to the right while the inserted image stays in place.

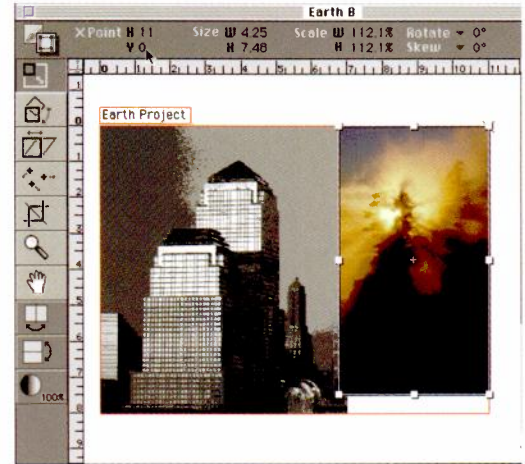
- 5 Click on the scale tool at the top of the tool bar. Now we leave the cropping mode and enter positioning in which the tools change the dimensions or location of the image within the workspace.

- 6 Drag the X Point to the upper right hand corner of the cropped image.

The X Point coordinates should now be approximately 6.25" X 0".

- 7 Click in the X coordinate and type the value 11. Press Tab. Type the value 0. Press Enter.

This has the effect of moving the entire image, along with the cropping window. It should now be aligned along the top and right side of the view.



- 7 Click on the mode switch icon to return to the creative tools.

There is a brief delay while Live Picture creates a stencil. At this point you have successfully inserted, cropped and positioned the Sunflare.

- 8 Rename the layer to "Sunbg."

INSERT, SCALE, SCALE POSITION AND CROP THE FERNS IMAGE

To complete the composite background you'll insert the image of a fern, scale, crop and position it. In the next step Sunflare and Ferns will be "blended" using an opacity gradient.

Both Sunflare and Fern are included on the first set of FITSClips disks. These are a series of CD ROMs that include scanned images, in IVUE format, that can be used as backgrounds for your composites.

1 Select Image Insertion from the Create menu. The Open Image dialog box is displayed. Again, Auto Insert should be turned off.

2 Double click “Ferns” to open it.

3 Click on the Scale W field in the multiplex bar. Type 90. Press Tab. Type 90. Press Enter.

This scales the image to 90% of actual file size. Note, that Live Picture doesn’t change the IVUE file. It records the scaling, and other positioning and cropping information within the image insertion layer. This information is taken into account when displaying the image and when the final output is generated.

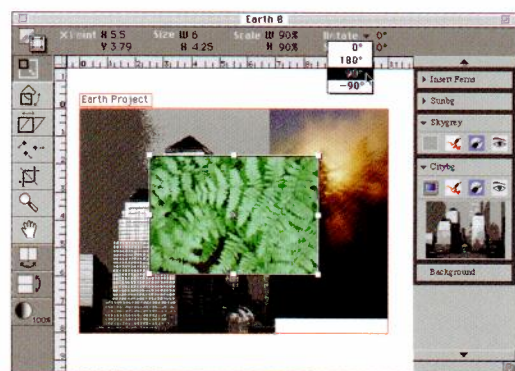
2 Click on the Crop tool to enter cropping mode.

3 Click on Size W in the multiplex bar and type 6. Press Tab. Type 4.25. Press Enter.

You’ve cropped the image to 6 inches wide by 4.25 inches high.

4 Click on the Scale tool to leave the cropping mode.

5 Pull down the Rotate menu in the multiplex bar and select 90°.



6 Pick up the X Point which is in the middle of the image and drag it to the lower right handle. It will click into place.

7 Click in the X coordinate in the multiplex bar and enter the coordinates X=11 and Y=8. (Remember, you move from field to field using the Tab key and press Enter to apply the new values.)

The image is repositioned exactly into the lower right corner.



8 Click on the mode switch icon to switch to the creative tools.

At this point you’ve finished positioning the third and final image in the background.

9 Click on the name in the layer bar and change it to “Fernsbg”.

CREATE A GRADIENT BLEND

There are two phases to inserting an image in Live Picture. The first, phase, which we have just completed, is to position the image within the workspace. The second phase is to use the top four creative tools: brush, eraser, palette knife, and marquee to create opacity effects. You can “ghost” in an image using brush and eraser, define rectangular areas to fill or erase using the fill and erase marquees. And, as we’ll do now, you can define opacity gradients using the gradient tool.

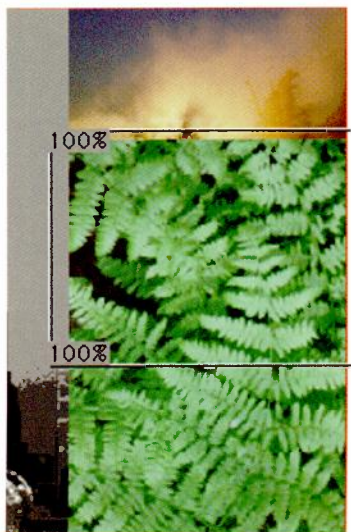
1 Select the Show Coordinates command from the View menu. The X and Y values of the cursor will be dynamically displayed within the multiplex bar on the right.

2 Click on the Marquee button and select Vertical from the Gradient from the submenu.



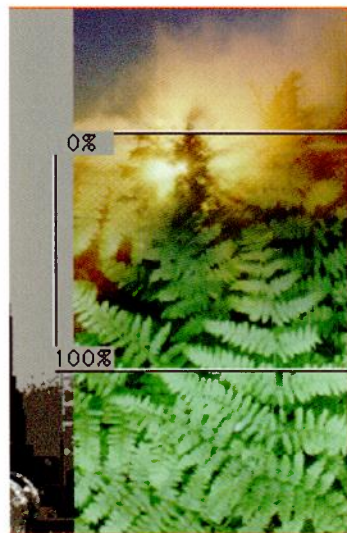
When you move the cursor back into the workspace it will be connected to crosshairs that will let you exactly position x and y coordinates. This indicates that one of the marquee tools (fill, erase, gradient) are activated and the next action should be to drag out a rectangle.

3 Click slightly above and to the left of the Ferns image (at approximately X=6.5 and Y=1.9) and drag out a rectangle until the cursor is positioned at approximately X=11.2 and Y=5). Release the gradient tool. A gradient box appears, covering roughly the middle third of the Sunflare and the top half of the Ferns.



4 Click in the top field marked 100% and drag the opacity slider to the right until it reaches 0%. Release the opacity slider. Click inside the gradient box to execute the gradient.

You have defined an opacity gradient, or blend, from 0% at the top to 100% at the bottom. If you have made a mistake then select Undo Gradient at the top of the Edit menu.



5 Click outside the box to complete the gradient.

COLOR CORRECT THE SUNFLARE: USING COLOR SHIFT

1 Click anywhere in the layer bar named "Sunbg". The layer bar is selected and is framed in blue.

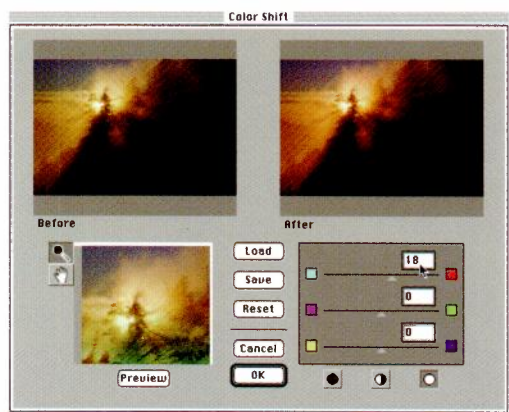
2 Select Color Shift from the IVUE Corrections submenu found in the Layer menu.

The Color Shift dialog box will open. This IVUE correction allows you to change the mixture of colors in an image. Essentially, you can independently increase, or decrease, the R-G-B components of the image. And this is performed selectively in the highlight, midtone, and shadow regions of the image.

Decreasing the red component has the effect of making the color more Cyan. Decreasing green increases the appearance of magenta and decreasing blue increases the appearance of yellow.

3 Use the zoom tool to drag out a rectangle around the sunflare, in the upper right corner of the Preview window.

4 Click on the highlight button (the white circle on the right) to correct the highlights. Move the top slider to the right until the numerical value reads 18. The After preview will update immediately and you'll see a marked shift towards red in the clouds and sun.



5 Click on the shadow button (the black circle on the left) to correct mainly the dark or shadow areas. Move the middle slider to the right until the value reads 27. Then move the bottom slider to the right until the value reads 76. The After preview will update immediately and you'll see a marked shift towards red in the clouds and sun.

6 Click on the Preview button to see the resulting effect on the composite image.

7 Click OK to apply the effect.

COLOR CORRECT THE FERNS: USING COLOR CONTROL

You're now going to be introduced to the most powerful of all IVUE corrections: Color Control. In fact, any

of the corrections that can be achieved using another IVUE correction can be performed using Color Control.

1 Click anywhere in the layer named "Fernsbg". The layer bar is selected and is framed in color.

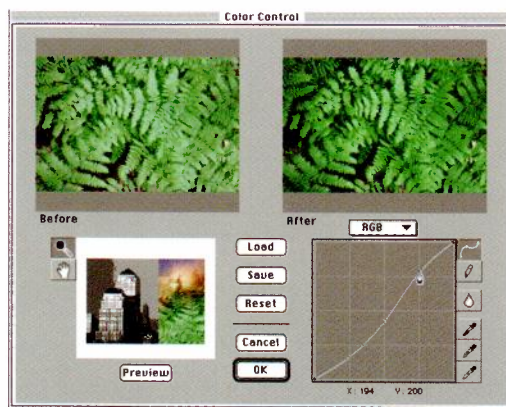
2 Select Color Control from the IVUE Corrections sub-menu found in the Layer menu.

The Color Control dialog box will open.

3 If it is not already selected, click on the path tool (the top icon next to the graph). Using this tool click on the center of the graph and drag the curve until the cursor is set at x=129, y=107. This will have the effect of slightly darkening the image.

4 Now click on the point where the curve crosses the third vertical line from the left and drag the curve straight up until the cursor is at x=194, y=200.

The cumulative effect is to lighten the already light regions and darken the already dark areas, i.e. to increase the contrast.



5 Click on OK to apply the effect.

6 Select the Save FITS As ... command on the File menu. Type the name "Earth Background" and press Enter to save the FITS file.

LESSON 4: CREATE A BEVELED GLASS PAPERWEIGHT

Steps: Build an IVUE file, Glass Edge, that will be reinserted. Create the top facet of the paperweight. Create paths. Convert them to stencils. Recover paths and redefine them. Reinsert the Glass Edge. Distort the edge. Add highlights and shadows.

Reference files: Earth Glass Top, Earth Glass Finish

In this lesson you will create a sophisticated glass paperweight that sits on top of and magnifies, reflects and distorts the underlying background image that was created in the previous lessons.

This lesson is broken into 7 steps.

STEP 1: BUILD AN IVUE FILE THAT WILL LATER BE REINSERTED

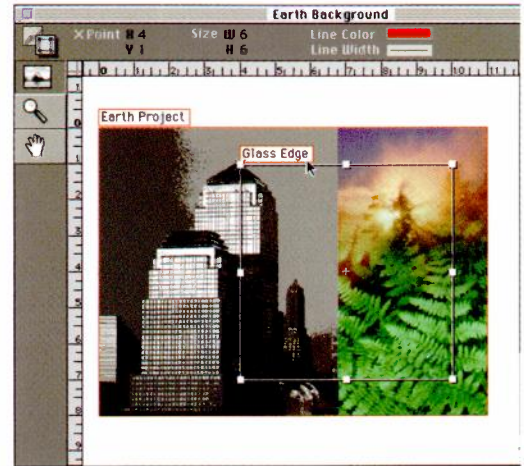
1 Select Add/Edit from the View menu. If the existing view, Earth Project, is still selected then click outside the rectangle to deselect it.

2 Drag out a new rectangular view. Don't worry about the shape or dimensions.

3 With the new view selected, click in the X coordinate field. Type 4. Then press Tab. Type 1 in the Y coordinate field. Press Tab to move to the Size field. Type 6, Tab and press 6 again. Press Enter to finish defining the view.

The X Point is set to X=4, Y=1 and Size is set to W=6, H=6.

4 Rename the view to "Glass Edge".



5 Click on the mode switch icon to return to the creative tools.

6 Select Build from the File menu.

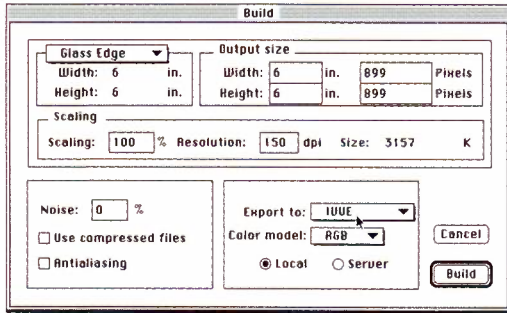
This is the first time that you're seeing the Build dialog box. We'll be using only a few of the Build options. For a more complete discussion consult the User Guide.

7 Select Glass Edge in the pull-down menu in the upper left-hand corner.

Tip: You must always define a view prior to using Build. The pull-down menu in the upper left of the build dialog box lists all the views that have been created.

8 Set the resolution to 150 dpi. Select IVUE from the "Export to" pull-down menu.

The scaling will be set to 100%. Make sure that the Antialiasing option is off. The color model should be RGB.



9 Click on the Build button.

10 The Save dialog box that is used for creating IVUE files is shown.

11 Type the name "Glass Edge". Make sure that the Compression check box is off and click on Save.

When we worked through this tutorial on a Quadra 840 AV it took less than a minute to build Glass Edge. Your build times will depend on your computer speed and configuration (memory, CPU and disk speed being the most important configuration dependent aspects).

Tip: When QuickTime is installed you have the option, by checking the Compression box, to compress IVUE files that you create. This option is also available in the Converter menu, which you use to convert files in other formats to the IVUE format.

Generally, when using QuickTime compression you'll want to select the Photo-JPEG option. This provides generally acceptable quality and greatly reduces the size of the IVUE file. We didn't use it here because we don't at this point want to assume that QuickTime is installed on your system.

STEP 2: CREATE THE TOP FACET OF THE BEVELED GLASS PAPERWEIGHT

1 Select Display from the View menu and click on "Glass Edge". This turns off the Glass Edge view.

The view is still available and can be used with the Go To command (in the View menu) or inside the Build.

2 Hold down the shift key and click once on each layer. All the layers will be selected. (If a layer is already selected then don't click on this one. Shift clicking on a layer that is already selected will turn it off.)

Note that you cannot select the background. In fact the only thing that you can do to the background is to change its color using the command Set Background Color in the View menu.

3 Select Group from the Layer menu. The three layer bars disappear and are replaced by a single bar named "Group n" (where n is a number).

4 Rename the group layer name to "Bg Elements."



5 Option drag the Group layer bar up slightly. When the color changes, release the mouse or stylus.

The group will be copied. At this point the topmost of the two groups is selected.

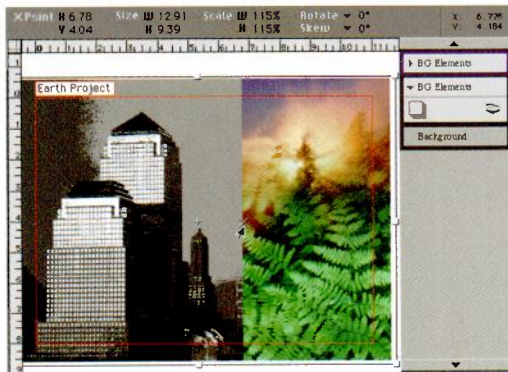
6 Click on the arrow of the lower group to open it. Then click on the eye icon. The eye closes. Closing a layer or group hides the layer or group. It can be made visible again at any time.

At this point the top Group should be selected, framed in blue. If it isn't then click once to select it.

7 Click on the mode switch icon to go into positioning mode.

8 Drag the X Point horizontally to the right until it lies directly on the edge where Cityscape meets the Sunflare and Ferns images.

9 Click on the Scale W field and type 115. Press Tab and type 115 again. Press Enter. You've scaled the grouped layers to 115% of their original size.



Note that the X Point was set deliberately so that the vertical line dividing the images would fall in the same place on both sets of grouped images, even though the second group has been scaled to 115% of the size of the first group.

10 Click on the mode switch icon to return to the creative tools.

11 Select Ungroup from the layer menu. The four layers are ungrouped.

We're doing this in preparation for the next step where we'll use each of the four layers individually. All the layers are now selected. You can deselect the layers by clicking on another layer or shift clicking in a selected layer.

12 Change the names of each of the top four layer bars (the ones that you just ungrouped) as follows: Fernstop, Suntop, Skygreystop, and Citytop.



STEP 3: CREATE STENCILS USING THE PATH TOOLS

For the next few steps we'll be working with precise coordinates so make sure that the rulers are on at this point.

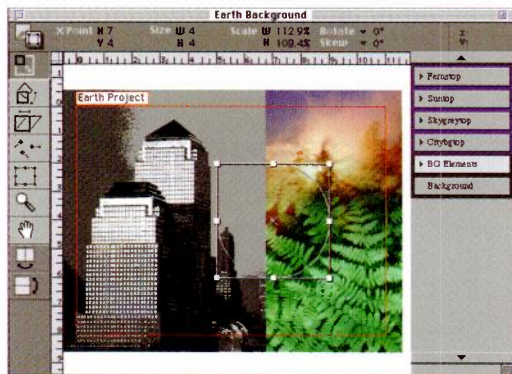
1 Click on the path button (the pen icon) and drag out the path tools menu. Select the oval tool.

2 Drag out an oval approximately 4" in diameter. Don't worry about where on the screen it appears, or what shape it has. Any size and shape will do as you'll soon see.

3 Click on the mode switch icon to change to the positioning mode.

4 Click in the X coordinate and enter the following values: X=7, Y=4; Size W=4, H=4. Then press Enter.

The oval is repositioned and transformed into a circle.

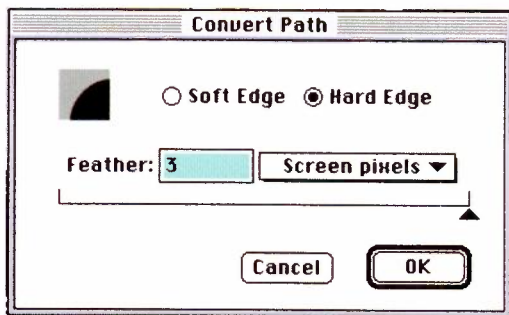


5 Click on the mode switch icon to return to the creative tools.

6 Select the layer Citytop.

7 Select Path -> Stencil in the Mask menu. The Convert Path dialog box appears.

This dialog box allows the user to specify the edge width parameters for the conversion of bezier paths into stencils. The default is Hard Edge. The slider lets you define the feather, or edge, width for soft edged stencils. The feather also applies if you create a hard edged stencil and later change it to soft edge. Thus, you should at least take notice of the edge width even when creating hard edge stencils.



Tip: If the Path -> Stencil command is not available, or if the Mask menu is not active then you need to double check the following: (1) a layer must be selected, since stencils are always assigned to layers, and (2) the path tool must be active (i.e. the path button in the tool bar is depressed).

8 Click on OK to create the hard edged stencil.

The circle is converted to a stencil and applied to the Citytop layer.

After a few seconds the screen is redrawn and only the part of the layer within the circular stencil is now visible. We'll now apply the same stencil to the Skygreypop layer (which as you may recall was used to paint gray to retouch a building).

9 Click on the path tool button. With the layer "Citytop" still selected, select the command Stencil -> Path from the Mask menu. A copy of the circular path is displayed.

10 Select the layer bar "Skygreypop" and press Cmd L (hold down the command key and press the letter L). The Convert Path dialog appears again. Click on OK.

A new stencil is created, this time in the Skygreypop layer.



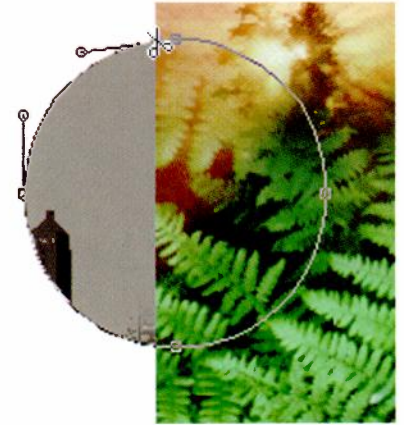
STEP 4: REDEFINING A PATH

Now using the path tools we'll modify the circular path to create a stencil that can be used for the Ferns and Sunflare layers to complete the circular shape.

1 Click on the path tool button. With the layer bar "Skygreytop" still selected, select the command Stencil -> Path from the Mask menu.

The circular path reappears. Now we'll use the scissors tool to cut the circle on the top, exactly where the circle crosses the intersection of the Sunflare image.

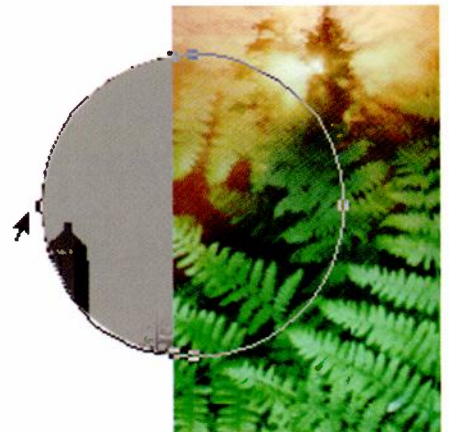
2 Select the scissors tool from the path tool menu. Holding down the option key, carefully position the scissors tool at exactly the point where the gray, the sunflare image and the top part of the circle meet. Place the intersection of the scissors on top of this point, and click.



This cuts the curve and adds a point where the curve is cut.

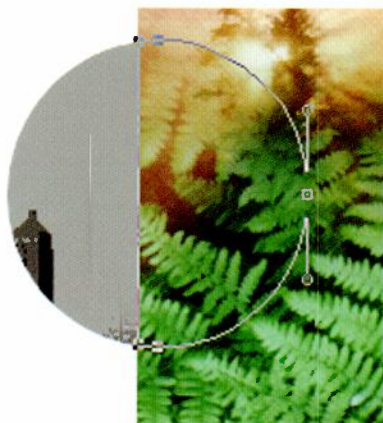
3 Now repeat the procedure, but this time cut the circle at the point where the gray and the Ferns image meet and the bottom part of the circle crosses. Again, holding down the option key, position the scissors at this point and click. A second point is added.

4 Using the path selection tool (the first of the pull-out icons), drag out a rectangle around the leftmost point of the circle. Release the mouse or stylus and the point will be selected. Press backspace to delete the point.



5 Again, using the selection tool, drag out a rectangle around the two points that you just added. When you release the mouse these two points, at the top and bottom of the circle, are selected.

6 Select Join Points from the Mask menu or press Cmd J (hold down the command key and press j) to join the cut ends with a straight line.



7 Click on the layer Suntop to select it. Press Cmd L. The Convert Path dialog box appears. Click on OK.

A semicircular stencil is created in the Suntop layer.

8 Click on the Path tool button. Select Stencil -> Path from the Mask menu.

9 Click on the layer Fernstop. Press Cmd L. The Convert Path dialog box appears again. Click on OK to complete creating the circular shape.



10 Select Save FITS As... to save the composite. Type the name "Earth Glass Top". Click on Save.

STEP 5: BUILD A COMPOUND PATH FOR THE EDGE

1 Select the layer bar "Citytop" by clicking on it. Click on the path tools button and select the "Stencil -> Path" command to retrieve the path for that layer.

2 Click on the mode switch icon to enter positioning mode.

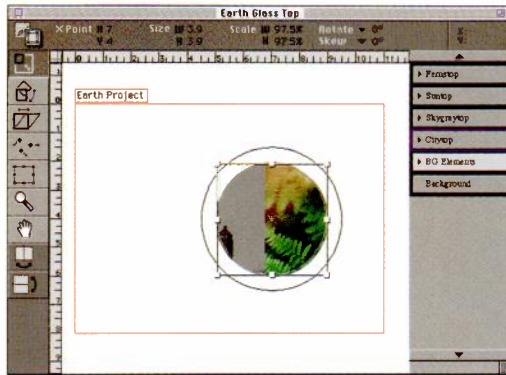
3 Click on the Size field and enter the values W=5, H=5. Press Enter.

4 Click on the mode switch icon to return to the creative tools.

5 With the Citytop layer still selected, retrieve another path (using the Stencil -> Path command in the Mask menu).

6 Click on the mode switch icon to return to positioning mode.

7 Click on the Size field in the multiplex bar and enter the values W=3.9, H=3.9. Press Enter.



INSERT THE GLASS EDGE

These two concentric circles will be used to create the side, or edge, of a beveled glass paperweight. At this point the two circles have not been assigned to any layer.

Next you'll insert the Glass Edge image that you previously built and use the concentric circles to form a compound path inside this layer. Also, you'll use Image Distortion for the first time.

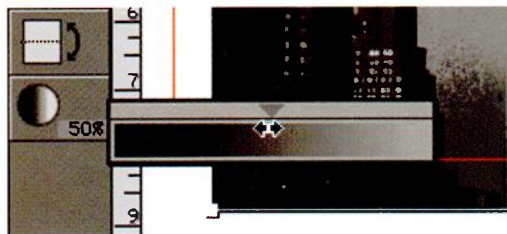
8 Select Image Distortion from the Create menu.

The Open Image dialog box is displayed. Verify that the Auto Insert checkbox is off.

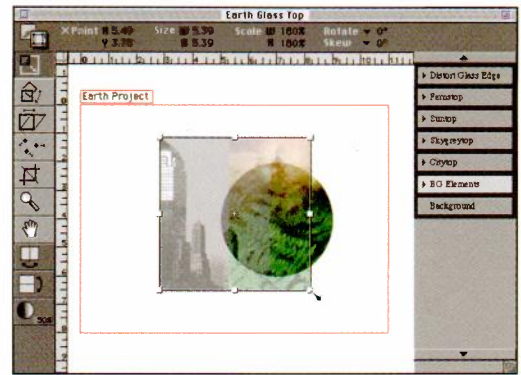
9 Double click on the file "Glass Edge" to open it.

SCALE AND ROTATE THE GLASS EDGE

10 Click on the opacity button and drag out the opacity bar to 50%. You'll see the round image beneath.

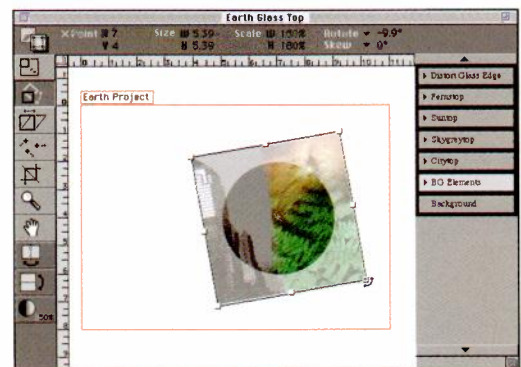


11 Click on one of the corner handlebars and drag the image inwards until the scale is approximately 180%.



12 To position the image directly over the glass top click on X coordinate and enter the values X=7, Y=4, followed by Enter.

13 Click on the rotate button (or hold down the option key), click on a handle and rotate the image to approximately -10°.



14 Click on the opacity button and set the opacity slider to 100%.

15 Click on the mode switch icon to return to the creative tools.

16 Click on the top layer bar and rename it Glass Edge.

17 Drag out the path tools pull-out menu and click on the selection tool. Drag out a selection rectangle over the entire image to select all the paths.



Tip: When a path becomes visible its handles become visible. Thus the four handles for each of the two concentric circles will become visible when both paths are selected.

18 Verify that the layer “Glass Edge” is still selected. If not then select it by clicking once. Press Cmd L to bring up the Convert Path dialog box. Move the feather slider to .5 (screen pixels) and click on OK.

A hard edged stencil will be created.



STEP 6: DISTORT THE EDGE

1 Using the Go To command in the View menu, select Glass Edge.

The screen will redraw and the view Glass Edge will fill the window.

2 Click on the brush button and select the Freehand tool.

3 Now brush around the ring to distort the edge. You want to create an effect of the refraction of light between the top of the glass paperweight and the sides. Use the eraser to modify or undo effects.

The amount of distortion is regulated by the tool pressure modifier. At the highest setting the distortion is extreme; at the lowest setting it is slight.



STEP 7: ADD HIGHLIGHTS AND SHADOWS

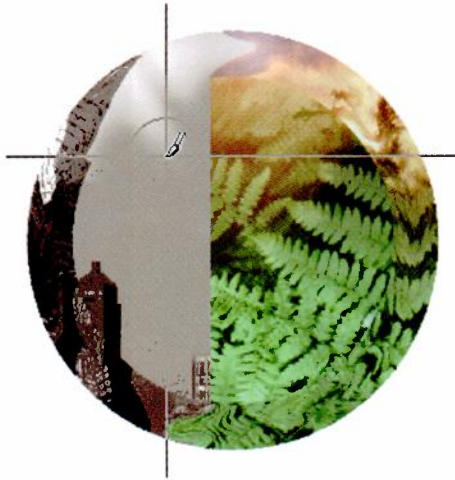
1 Select Colorize from the Create menu.

A new layer is created.

2 Click in the layer bar and rename the layer “Edge Color.”

ADD A HIGHLIGHT

3 Click on the brush button and select the Lighten brush. Now paint the top left edge of the paperweight to create the effect of light striking this area.



Now we'll copy the concentric circle stencil that you created within the Glass Edge to the Edge Color layer. This will constrain the lighting and darkening effect (still to come) within the edge.

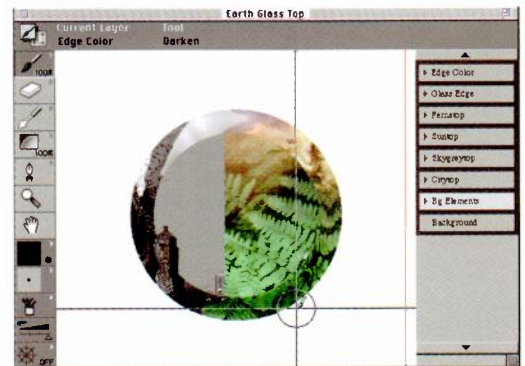
4 Open the layer bar for Edge Color by clicking on the triangle. Now open the Glass Edge layer bar in the same way.

5 Option drag the stencil from the Glass Edge layer to the Edge Color layer.

The light color will be constrained within the paperweight edge.

**ADD A SHADOW**

6 Click on the brush button and select the Darken brush. Now paint on the bottom right, opposite the area which you lightened to give the effect of a shadow.

**USE A VERTICAL GRADIENT TO COLOR THE TOP**

7 Select Colorize again from the Create menu.

8 Rename the layer "Top Color".

9 Click on the marquee button and select a vertical gradient (the selection "Vertical" from the Gradient submenu). Drag out a rectangle over the paperweight.

10 Set the opacity value of the top opacity slider to 50%. To do this, drag out the top opacity slider, which you activate by clicking inside the opacity value (initially set to 100%) and dragging to 50%. By simultaneously holding down the shift key, you constrain the slider to move in increments of 10%.

11 Set the bottom opacity slider value to 20%.

The color values of both the top and bottom should be black.

12 Click inside the gradient box to apply the gradient.



12 Click outside the gradient box to deselect the gradient.

13 Open the layer Top Color and the layer Citytop. Option drag the stencil icon from the Citytop layer bar to the Top Color layer bar.

This circular stencil will constrain the black gradient to the top of the glass paperweight.

14 Click once on the layer Top Color to select it.

15 Click on the mode switch to switch to positioning mode.

16 Click in the Rotate field. Type -10 and press Enter.

17 Go to the view named Earth Project. To do this, pull out the list of views, using the Go To command in the View menu. Select Earth Project.

18 Open the bottom layer named Bg Elements. Click on the closed eye to display the background.



19 Save the file as "Earth Glass Finish".

20 Select Close from the File menu and close the image. In the next lesson you'll be working on a different file.

LESSON 5: SILHOUETTE THE EARTH USING PATH TOOLS. THEN COLOR CORRECT.

Steps: Insert and position the Earth. Create a stencil. Color correct the image using Color Levels and then add an opacity gradient.

Reference file: Globe

You'll now create a new image, named Globe, by silhouetting an image of the earth using the path tools. This is an alternative method to the automatic Image Silhouetting tools presented in The Rose tutorial. After silhouetting the Earth you will color correct it and ghost it using the gradient tool.

In the next lesson, lesson 6, you'll go on to create a text logo. Finally, in lesson 7 you'll combine Earth Glass, which you just created, with Globe and the text logo.

INSERT THE EARTH IMAGE

- 1 Select Document Setup from the File menu.
- 2 Verify that the Document Setup values are identical to those that you used in Lesson 1, namely:

Define Initial View:	On
Width - Height:	11" X 8"
Units:	Inches
Background color:	White
Resolution:	300 dpi

- 3 Click on New to begin a new document.
- 4 Select Image Insertion from the Create menu.

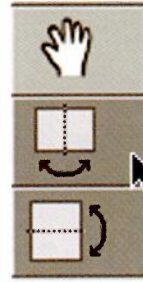
The Open Image dialog box is displayed. Auto Insert should be off.

- 5 Select the image named Earth. The image will open in the image insertion mode in which you position, scale and crop the image.

- 6 Click in the Scale W field in the multiplex bar and enter the values W=95, H=99. We do this because the

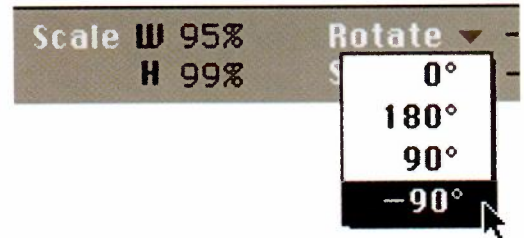
image of the earth is slightly elliptical. Rescaling will make it more circular.

- 7 To position the image correctly first click on the vertical flip button (second button from the bottom in the tool bar).



- 8 Now pull down the menu next to the word Rotate in the multiple bar and select -90.

Although the earth is obscured by the clouds in the image, the objective is for Madagascar to end up to the right of the African continent.



Tip: The flip tools use combinations of rotation and skewing while the 3 Point tool combines rotation, skewing and scaling. After using one of these tools, the multiplex bar values will be updated to show the new rotation, skewing, and scaling values.

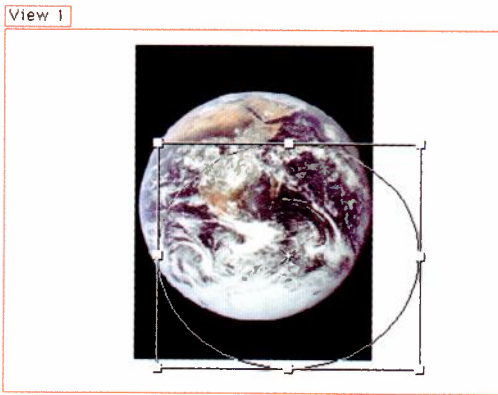
- 9 Switch modes to go the creative tools.
- 10 Change the name of the layer to "Globe" to "Earth".

USE A CIRCULAR PATH TO STENCIL THE EARTH

1 Select the oval from the path tool pull-out menu. Drag out a circle or oval that is roughly the same size as the Earth.

Tip: The tool draws ovals. If you drag diagonally then the oval comes close to being a circle. If you drag horizontally or vertically you draw a very flat oval, close to a line. To draw a precise circle, hold down the shift key while you drag.

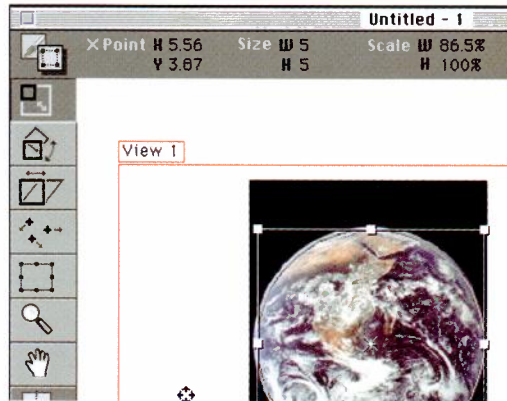
2 Make sure that the oval is selected, i.e. the four handles are visible, and click on the mode icon to switch to the positioning tools.



3 Click in the Size W field in the multiplex bar. Now type the values W=5, H=5 and press Enter.

The oval is resized to a perfect circle with a 5" diameter.

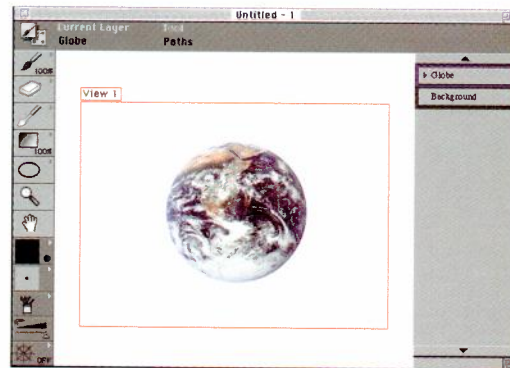
4 Now drag the box until the circle fits exactly inside the Earth.



5 Click on the mode switch icon to return to the creative tools.

6 Press Cmd L (hold down the command key and type L). The Convert Path dialog box appears. Click OK.

The path is transformed to a stencil thus creating a perfectly round Earth. The Earth background is stripped away.



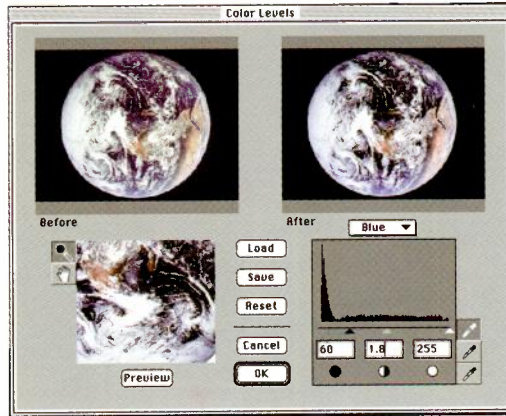
COLOR CORRECT THE EARTH

1 Select Color Levels from the IVUE Correction submenu in the Layer menu.

2 Using the default eyedropper click on an area of the black in the before window. Drag open the RGB popup menu and select Blue.

3 Enter the following values: Shadow=60, Midtone=1.8, and Highlight=255.

4 Click Preview to see the resulting effect.



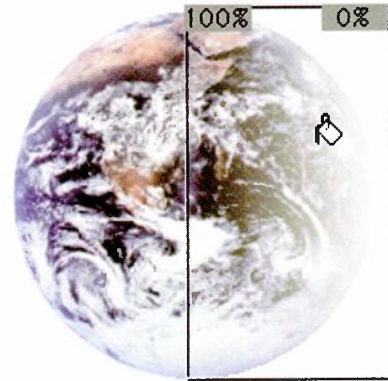
5 Click OK to apply the change to the Earth image.

APPLY AN OPACITY GRADIENT

Now we'll apply an opacity gradient. This is another ghosting, or compositing technique. Rather than using a brush we'll use the gradient tool.

1 Click on the marquee and select Horizontal from the Gradient pull-out menu.

2 Drag the marquee over the right half of the globe. Leave the left opacity value at 100% and set the right to 0%. Click inside the rectangle to apply the gradient.



3 Click outside the rectangle to accept the gradient values.

4 Save the FITS file using the name "Globe."

5 Select Close from the File menu.

LESSON 6: CREATE A TEXT LOGO

Steps: Create a logo using the type tool. Then add a soft drop shadow and color.
Reference file: Earth Logo

You'll now create the final separate element, which will be combined later into the composite. This image is a text logo that is first created using the type tool. Then the individual characters are repositioned. Finally, a drop shadow is added.

OPEN THE LAYOUT

1 Select Open FITS from the File Menu. Now select the file "Earth Logo Base."

Earth Logo Base is a template that shows you how the text logo should look. You can imagine that this was a hand drawn rough that was scanned and is being used as a guideline.

2 If the view "Earth Logo" is not centered on the screen, then select Go To from the View menu and choose the view "Earth Logo."

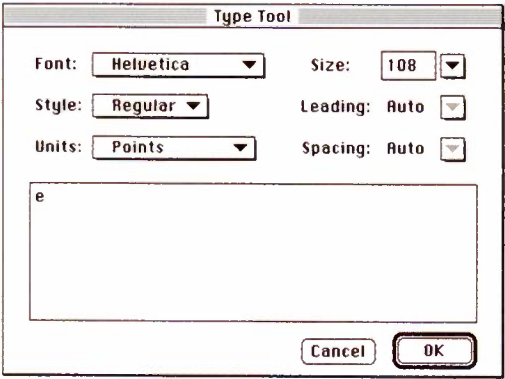
USE THE TYPE TOOL TO TYPE THE LETTERS IN THE LOGO

1 Drag open the Path tool icon menu and select the Type tool. (The letter T on the right.)

2 Find an open area in the workspace and click. The type tool dialog box appears.

Now you'll create the word Earth, letter at a time.

3 Select the font Helvetica, 108 points, and type a lowercase 'e' in the text box.



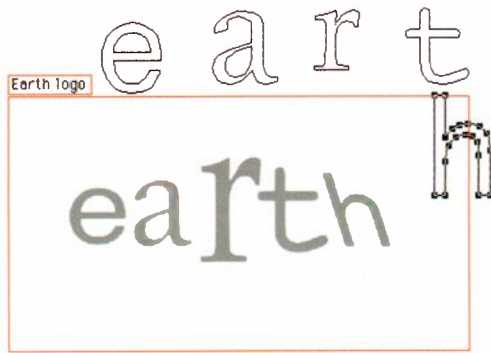
4 Click OK.

The letter 'e' is created on the screen as a path.



4 Repeat steps 2 and 3 for the letters a, r, t, h using the fonts shown below. Click in a different place each time so that the letters don't overlap.

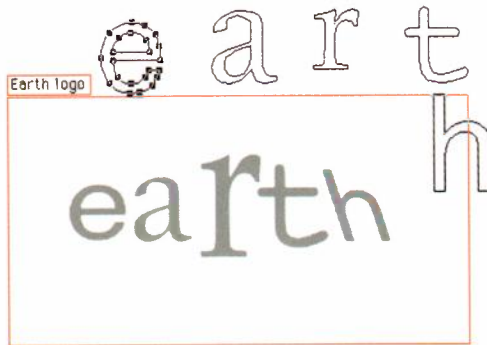
a	New York
r	Palatino
t	Courier
h	Geneva



REPOSITION EACH OF THE LETTERS IN THE LOGO

1 Select the arrow tool and draw a rectangle around the “e”.

The letter is selected. Now you will reposition the letter to match the letter “e” in the Earth Logo Base.



2 Click on the mode switch icon to switch to positioning mode.

3 Using the positioning tools, match the letter to the layout.

Tip: To match a letter, in path format, to a letter in the layout do the following:

- Move the positioning box so that one of the four corners matches a corner of the corresponding letter in Earth Logo Base.
- Now move the X Point to that corner.
- Next drag one of the other corners inward until the letter scales to approximately the right size.
- Finally, use the skew, rotate and other handles to match the letters more exactly.



4 Click on the mode switch icon to return to the creative tools.

5 Repeat steps 1-4 for the letters a-r-t-h.

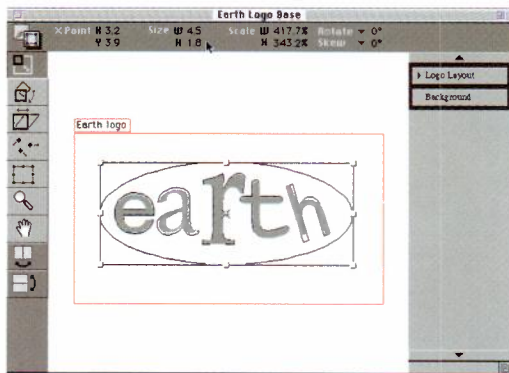
At this point you’ve created the text that will be used in the logo.



CREATE A BLUE ELLIPSE

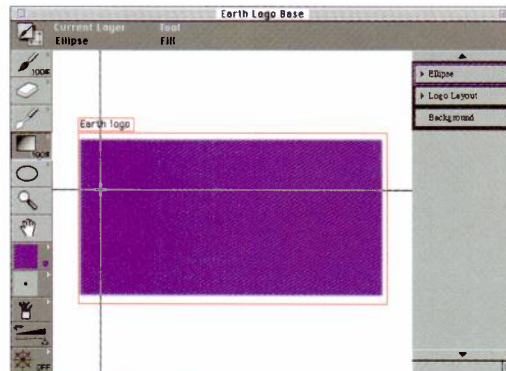
Now you'll create an elliptical colored background for the text.

- 1 Drag out the path tool menu and click on the oval. Draw an ellipse of any size.
- 2 Switch to positioning mode.
- 3 Enter the following values in the multiplex bar: X = 3.2", Y = 3.9", Size W = 4.5", H = 1.8". An oval is created that encompasses the text.

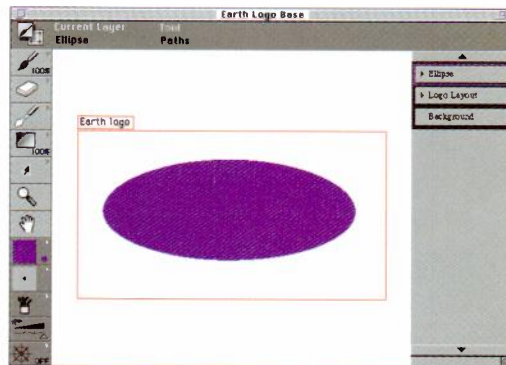


- 4 Click on the mode switch icon to return to the creative tools.
- 5 Select Monocolor from the Create menu. A new layer is created.
- 6 Rename the new layer "Ellipse".
- 7 Drag out the color bar and select a medium or dark blue.

- 8 Click on the marquee, select fill and drag out a rectangle the size of the view "Earth Logo".



- 9 Click on the Path tool menu and select the arrow. The paths you have thus far created become visible. If its not already selected, click on the ellipse to select it. The four control points will become visible.
- 10 Select Path->Stencil (Cmd L) from the Mask menu and click OK. The rectangular blue filled area is constrained to the elliptical stencil.

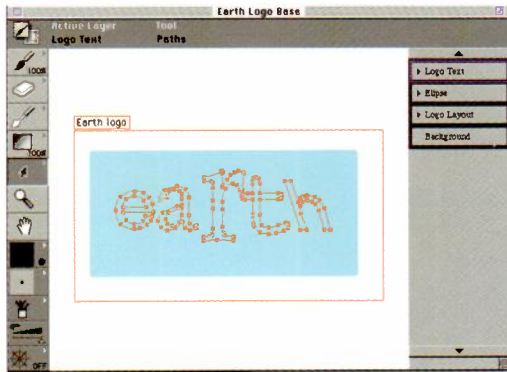


CREATE COLORED TEXT

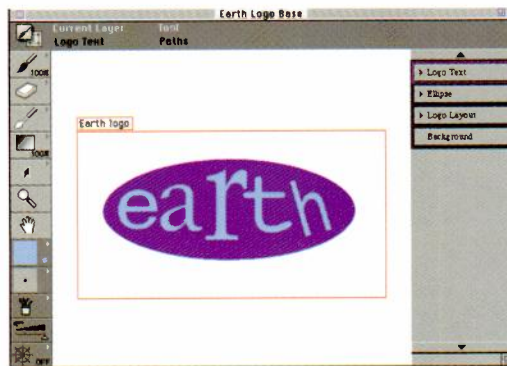
We'll essentially repeat the last procedure to fill the earth logo with color.

- 1 Select Monocolor from the Create menu. A new layer is created.
- 2 Rename the layer "Logo Text".

- 3 Drag out the color bar and select a light blue.
- 4 Click on the marquee, select fill and drag out a rectangle that covers the blue ellipse.
- 5 Click on the Path tool and select the arrow tool. The word “earth” appears. Drag out a rectangle around the text. All letters should be selected.



- 6 Type Cmd L to bring up the Convert Path dialog box. Click on the soft edge radio button and leave the slider at the minimum value (2 pixels). Click OK. A soft edged stencil is created.



ADDING A DROP SHADOW

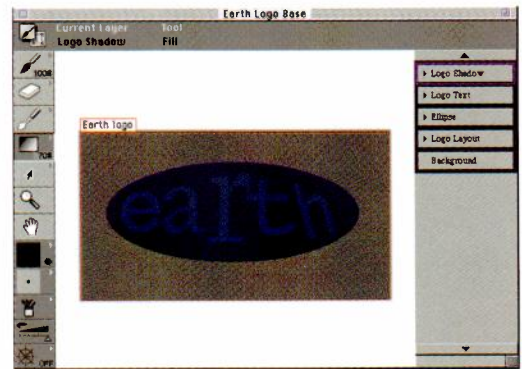
Now an elliptical drop shadow will be added and then moved behind the dark blue ellipse.

- 1 Select Monocolor from the Create menu.
- 2 Rename the layer bar “Logo shadow”.

- 3 Drag out the color bar and select black. (In the R-G-B system, black is equal to R=0, G=0, B=0.)
- 4 Drag out the marquee opacity slider and set it to 70%. Then pull out the marquee menu and select Fill.

Hint: Shadows are easily created using monicolor layers. A shadow is gray or black at less than 100% opacity. You can also use gradients to produce realistic shadow effects.

- 5 Drag out a rectangle the size of the view.



- 6 Select the layer named “Ellipse” and click on the path tool.

- 7 Select Stencil->Path from the Mask menu.

The elliptical path that you used to create the background for the logo reappears.

- 8 Click on the path to select it and drag it downward and to the right, keeping it inside the view.

9 Select the layer bar “Logo Shadow.” Then press Cmd L. The Convert Path dialog box appears. Set the radio button to Soft Edge and set the feather to .5” and click OK.

The stencil is created and the elliptical shadow appears.



10 Drag the layer bar “Logo Shadow” below layer bar “Ellipse.”

11 Select the layer “Logo Layout”. Select Delete from the Layer menu.

The initial layout is deleted and you are left with the finished logo.



12 Save the file as “Earth Logo”.

13 Close the file.

LESSON 7: COMBINE THE ELEMENTS TO CREATE A FINISHED IMAGE

Steps: Merge Earth Glass Finish and Globe. Position Globe. Add a horizontal gradient. Create a Colorize layer and add a color gradient on top of the cityscape.

Reference file: Earth Project Final

MERGE THE FILES “EARTH GLASS FINISH” AND “GLOBE”

1 Select Open FITS from the File menu.

2 Locate and select the file “Earth Glass Finish.”

3 Select Merge from the File menu.

You’re now going to merge the file Globe.

4 Locate and select the FITS file “Globe.” Make sure that the Fit in Window box is not checked.

“Globe”, which consists of one layer, is inserted at the top of the layer stack. You are placed in positioning mode.



5 Enter the following values for the X Point: X = 4.5”, Y = 4”.

Note that by setting Y=4” Globe is positioned in the vertical middle of the image.



ADD A GRADUATED COLOR

1 Select Monocolor from the Create menu.

A new layer is begun and the switch to the creative mode is made automatically. It is not necessary to switch modes before creating a new layer.

2 Rename the layer "Gradation".

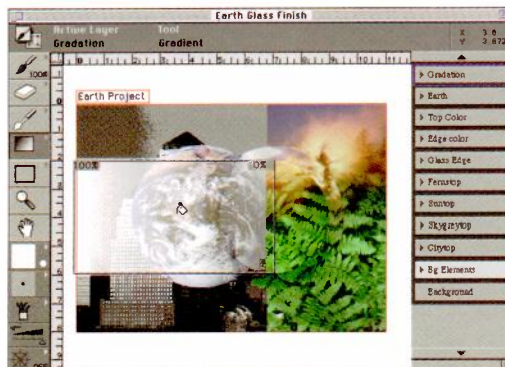
3 Click on the color selector, and drag out the eyedropper. Pick the color white off the background.

4 Click the Marquee and select a Horizontal Gradient.

5 Select Show Coordinates in the View menu (if Show Coordinates is not already on). The rulers should be turned on as well.

6 Drag out a marquee from (X=0", Y=2") to (X=7", Y=6").

7 Set the left hand value at 100% and the right hand value at 0%. Click in the rectangle to apply the gradient.



8 Then click outside the rectangle to deselect it.

Now we'll position the rectangle precisely and use it to create a stencil that precisely defines the gradient.

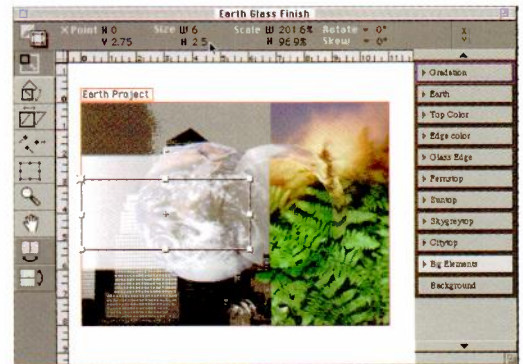
9 Drag out the path tool menu and click on the rectangle icon.

10 Draw a rectangle inside the view. At this point the rectangular path is selected and the control points are visible.

11 Click on the mode switch icon to position the path.

12 Drag the X Point to the left top handle.

13 Enter the following values in the multiplex bar: X Point: X = 0", Y = 2.75", Size: W = 6", H = 2.5". Press Enter to apply the values.



14 Click on the mode switch icon to return to the creative tools.

15 Press Command L. The Convert Path dialog box appears. Click OK to create a hard edged stencil.

The white horizontal gradient is clipped by the narrower rectangle.

MERGE THE FILE “EARTH LOGO”

- 1 Select Merge from the File menu.
- 2 Locate and select the FITS file “Earth Logo”. Again verify that the Fit in Window option is not selected.

The Earth Logo is inserted. Three new layers are inserted on top of the layer stack.



ADD A COLOR GRADIENT ON TOP OF CITYSCAPE

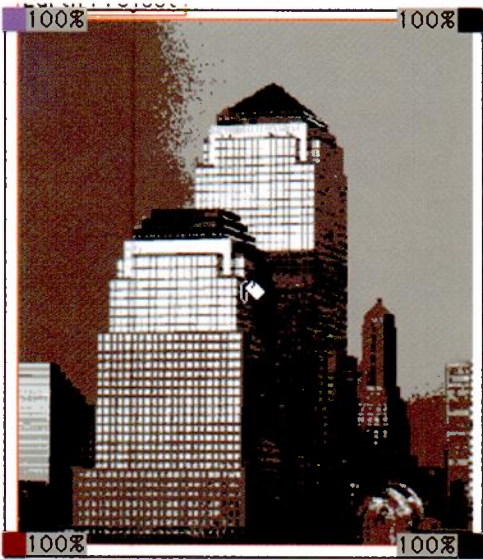
Now we'll add a color gradient layer on top of the (retouched) Cityscape image. This image had been turned to black and white and posterized. We're going to go back and revise this layer to illustrate that it is possible to add effects and layers at any time.

- 1 Select the grouped layer “Bg Elements”.
- 2 Select Ungroup from the Layer menu.

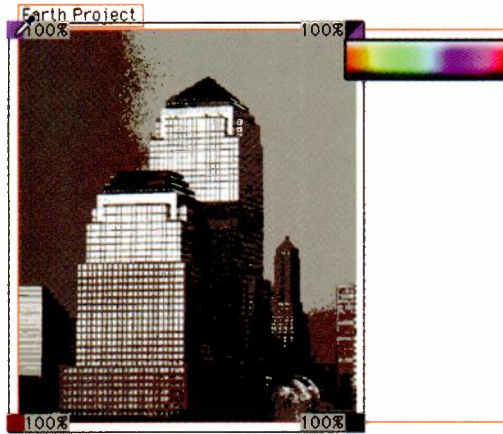
The four layers that had been grouped revert to individual layers.

- 3 Double click on the layer “Skygrey.” Skygrey will become the active layer. Remember, Skygrey was the retouching layer in which you painted out the partial building on the right of Cityscape.
- 4 Select Colorize from the Create menu. A new layer is added just above Skygrey. It becomes the new active layer.

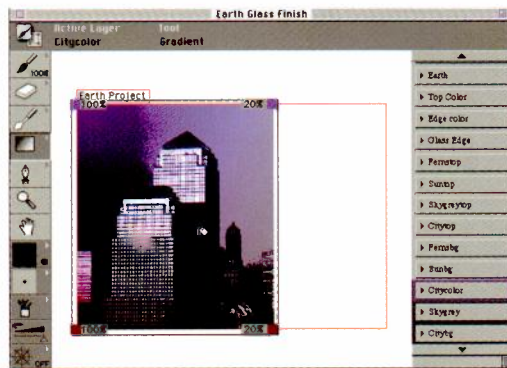
- 5 Rename the layer “Citycolor”.
- 6 Click on the Marquee and select a 4 Point Gradient.
- 7 Drag out a gradient box that covers the entire Cityscape image.
- 8 Click in the left top color box next to the percentage value and drag out the small color bar. Select a blue color. In the bottom left color box select a red/brown color. The opacity of each left corner remains at 100% the default.



- 9 In the top right color box, drag out the color bar and use the eye dropper to select the blue from the upper left box. Then use the opacity slider to select 20%. Repeat the procedure for the bottom right, this time selecting the red/brown color and 20% opacity.



10 Click inside the gradient box to apply the gradient.



11 Click outside the box to deselect the gradient.

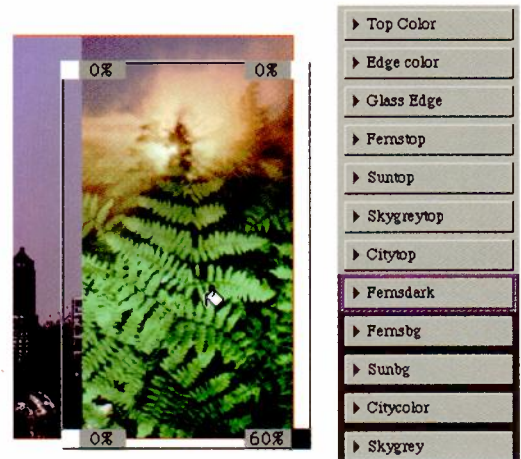
ADD A COLOR GRADIENT ON TOP OF FERNS

To complete this final recoloring we'll darken the Ferns image using a Colorize gradient.

- 1 Double click on the layer named "Fernsbg."
- 2 Again, select Colorize from the Create menu.
- 3 Rename the layer "Fernsdark."
- 4 Click on the Marquee and select a 4 Point Gradient.

5 Drag out a gradient box that covers the Ferns image entirely.

6 Set the top left, top right, and bottom left values to white and 0% percent. Set the bottom right to black and 60%. Click in the rectangle. Click outside to deselect it.



7 Double click on the top layer "Logo Text ." By making the top layer active you can see the completed composite.

8 Save the file as "Earth Project Final."

LESSON 8: BUILD AN OUTPUT FILE

Steps: Build out the file as a 17 Mb TIFF CMYK image.

Reference file: Earth Project Final

1 Select Build from the File menu.

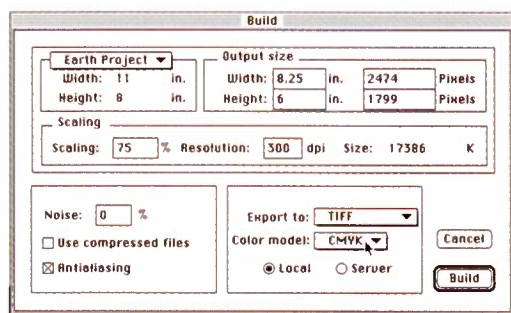
2 The Build dialog box appears. Set the following:

Scale: 75%

Antialiasing: On

Color model: CMYK

Export to: TIFF



3 Click on Build.

4 Enter the name Earth Project TIFF (or another name if you like) and click OK.

A dialog box appears that indicates the time elapsed thus far and the percentage complete. On a Quadra 800 with 64 Mbytes of RAM, it took 12 minutes to build this image. This speed, approximately 1.4 Mbytes per minute, is at the slow end of what you can expect from Live Picture.

The factors that make this relatively slow are:

- CMYK output is somewhat slower than RGB,
- there are five composited images,
- there are over 20 layers which makes it a sophisticated composite,
- the use of anti-aliasing, which is definitely necessary in this case due to the hard edged stencils, and the use of scaling, and
- the use of image distortion.

On the fast end, many images can be built out in RGB at a speed of 5 Mbytes or more per minute.

The build can be interrupted at any time by clicking Pause in the Build dialog box. Pausing the build will allow you to leave Live Picture temporarily to use your Macintosh for other purposes. When you return, you can continue the build by clicking on Resume. Alternatively, you can halt the build at any time by pressing End.

Congratulations on having completed Earth Project. You've been introduced to many of Live Picture's different types of layers and to the production tools that you will use to construct sophisticated composites. There are additional layer types and tools for you to explore but with this fundamental base of experience you are well on your way.